

Hans-Joachim Freund

List of Publications by Citations

Source: <https://exaly.com/author-pdf/90381/hans-joachim-freund-publications-by-citations.pdf>

Version: 2024-04-27

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

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

830
papers

41,547
citations

100
h-index

157
g-index

877
ext. papers

43,514
ext. citations

5
avg, IF

7.49
L-index

#	Paper	IF	Citations
830	Catalysis and Surface Science. <i>Physics Today</i> , 1999 , 52, 32-38	0.9	1262
829	Metal deposits on well-ordered oxide films. <i>Progress in Surface Science</i> , 1999 , 61, 127-198	6.6	832
828	Surface chemistry of carbon dioxide. <i>Surface Science Reports</i> , 1996 , 25, 225-273	12.9	647
827	CO oxidation as a prototypical reaction for heterogeneous processes. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 10064-94	16.4	510
826	Formation of a well-ordered aluminium oxide overlayer by oxidation of NiAl(110). <i>Surface Science</i> , 1991 , 259, 235-252	1.8	502
825	Oxide ultra-thin films on metals: new materials for the design of supported metal catalysts. <i>Chemical Society Reviews</i> , 2008 , 37, 2224-42	58.5	459
824	Clusters and islands on oxides: from catalysis via electronics and magnetism to optics. <i>Surface Science</i> , 2002 , 500, 271-299	1.8	392
823	Photochemistry on metal nanoparticles. <i>Chemical Reviews</i> , 2006 , 106, 4301-20	68.1	390
822	Oxide surfaces. <i>Reports on Progress in Physics</i> , 1996 , 59, 283-347	14.4	347
821	Nanoparticles for heterogeneous catalysis: new mechanistic insights. <i>Accounts of Chemical Research</i> , 2013 , 46, 1673-81	24.3	304
820	Control of the charge state of metal atoms on thin MgO films. <i>Physical Review Letters</i> , 2007 , 98, 096107	7.4	296
819	Molecular beam experiments on model catalysts. <i>Surface Science Reports</i> , 2005 , 57, 157-298	12.9	291
818	Palladium Nanocrystals on Al ₂ O ₃ : Structure and Adhesion Energy. <i>Physical Review Letters</i> , 1999 , 83, 4120-4	12.3	282
817	Structure and defects of an ordered alumina film on NiAl(110). <i>Surface Science</i> , 1994 , 318, 61-73	1.8	278
816	Do quantum size effects control CO adsorption on gold nanoparticles?. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 118-21	16.4	259
815	Hydrogenation on metal surfaces: why are nanoparticles more active than single crystals?. <i>Angewandte Chemie - International Edition</i> , 2003 , 42, 5240-3	16.4	253
814	Adsorption of Gases on Complex Solid Surfaces. <i>Angewandte Chemie International Edition in English</i> , 1997 , 36, 452-475		237

813	Electron transfer at oxide surfaces. The MgO paradigm: from defects to ultrathin films. <i>Chemical Reviews</i> , 2013 , 113, 4035-72	68.1	232
812	Molecular adsorption on oxide surfaces: Electronic structure and orientation of NO on NiO(100)/Ni(100) and on NiO(100) as determined from electron spectroscopies and ab initio cluster calculations. <i>Physical Review B</i> , 1991 , 43, 1969-1986	3.3	232
811	The application of infrared spectroscopy to probe the surface morphology of alumina-supported palladium catalysts. <i>Journal of Chemical Physics</i> , 2005 , 123, 174706	3.9	231
810	CO Adsorption on Pd Nanoparticles: Density Functional and Vibrational Spectroscopy Studies. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 255-264	3.4	229
809	Vibrational spectra of alumina- and silica-supported vanadia revisited: An experimental and theoretical model catalyst study. <i>Journal of Catalysis</i> , 2004 , 226, 88-100	7.3	223
808	EBonded N2 on Fe(111): The Precursor for Dissociation. <i>Physical Review Letters</i> , 1984 , 53, 850-853	7.4	215
807	Acetylene and Ethylene Hydrogenation on Alumina Supported Pd-Ag Model Catalysts. <i>Catalysis Letters</i> , 2006 , 108, 159-164	2.8	206
806	Monolayer iron oxide film on platinum promotes low temperature CO oxidation. <i>Journal of Catalysis</i> , 2009 , 266, 359-368	7.3	205
805	Crossover from three-dimensional to two-dimensional geometries of Au nanostructures on thin MgO(001) films: a confirmation of theoretical predictions. <i>Physical Review Letters</i> , 2007 , 98, 206103	7.4	205
804	Hydroxyl groups on oxide surfaces: NiO(100), NiO(111) and Cr2O3(111). <i>Chemical Physics</i> , 1993 , 177, 533-546	2.3	204
803	On the bonding and reactivity of CO2 on metal surfaces. <i>Surface Science</i> , 1986 , 172, 1-30	1.8	196
802	Atomic structure of a thin silica film on a Mo(112) substrate: a two-dimensional network of SiO4 tetrahedra. <i>Physical Review Letters</i> , 2005 , 95, 076103	7.4	189
801	The atomic structure of a metal-supported vitreous thin silica film. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 404-7	16.4	185
800	The influence of defects on the Ni 2p and O 1s XPS of NiO. <i>Journal of Physics Condensed Matter</i> , 1992 , 4, 7973-7978	1.8	185
799	Interaction of Gold with Cerium Oxide Supports: CeO2(111) Thin Films vs CeOx Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 6042-6049	3.8	183
798	Gold supported on thin oxide films: from single atoms to nanoparticles. <i>Accounts of Chemical Research</i> , 2008 , 41, 949-56	24.3	179
797	Growth and structure of crystalline silica sheet on Ru(0001). <i>Physical Review Letters</i> , 2010 , 105, 146104	7.4	178
796	The interplay between structure and CO oxidation catalysis on metal-supported ultrathin oxide films. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 4418-21	16.4	178

795	Photon emission spectroscopy of individual oxide-supported silver clusters in a scanning tunneling microscope. <i>Physical Review Letters</i> , 2000 , 84, 3994-7	7.4	175
794	Role of ceria in oxidative dehydrogenation on supported vanadia catalysts. <i>Journal of the American Chemical Society</i> , 2010 , 132, 2345-9	16.4	171
793	Geometric characterization of a singly charged oxygen vacancy on a single-crystalline MgO(001) film by electron paramagnetic resonance spectroscopy. <i>Physical Review Letters</i> , 2005 , 94, 186101	7.4	169
792	Well-ordered transition metal oxide layers in model catalysis--a series of case studies. <i>Chemical Reviews</i> , 2013 , 113, 3986-4034	68.1	164
791	Metal-supported ultrathin oxide film systems as designable catalysts and catalyst supports. <i>Surface Science</i> , 2007 , 601, 1438-1442	1.8	153
790	Cluster core-level binding-energy shifts: the role of lattice strain. <i>Physical Review Letters</i> , 2004 , 93, 026805	7.4	150
789	The adsorption of N ₂ : Chemisorbed on Ni(110) and physisorbed on Pd(111). <i>Surface Science</i> , 1982 , 118, 465-495	1.8	150
788	Influence of carbon deposition on the hydrogen distribution in Pd nanoparticles and their reactivity in olefin hydrogenation. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 9289-93	16.4	149
787	Hydroxy ¹ driven reconstruction of the polar NiO(111) surface. <i>Surface Science</i> , 1994 , 315, L977-L982	1.8	149
786	The surface structure of Fe ₃ O ₄ (111) films as studied by CO adsorption. <i>Surface Science</i> , 2004 , 572, 103-118	11.8	148
785	Morphology and defect structure of the CeO ₂ (1 1 1) films grown on Ru(0 0 0 1) as studied by scanning tunneling microscopy. <i>Surface Science</i> , 2006 , 600, 5004-5010	1.8	147
784	Introductory Lecture: Oxide surfaces. <i>Faraday Discussions</i> , 1999 , 114, 1-31	3.6	147
783	CO adsorption on oxide supported gold: from small clusters to monolayer islands and three-dimensional nanoparticles. <i>Surface Science</i> , 2004 , 552, 27-34	1.8	146
782	Catalytic activity and poisoning of specific sites on supported metal nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2002 , 41, 2532-5	16.4	146
781	Bridging the pressure and materials gaps: high pressure sum frequency generation study on supported Pd nanoparticles. <i>Physical Review Letters</i> , 2000 , 85, 776-9	7.4	146
780	Interaction of gold clusters with color centers on MgO(001) films. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 2630-2	16.4	145
779	Size and Support Effects for CO Adsorption on Gold Model Catalysts. <i>Catalysis Letters</i> , 2003 , 86, 211-219	2.8	145
778	Adsorption and reaction of CO ₂ and CO ₂ /O CO-adsorption on Ni(110): Angle resolved photoemission (ARUPS) and electron energy loss (HREELS) studies. <i>Surface Science</i> , 1987 , 179, 59-89	1.8	144

777	Infrared spectroscopic investigation of CO adsorbed on Pd aggregates deposited on an alumina model support. <i>Surface Science</i> , 1998 , 399, 190-198	1.8	141
776	Electron localization in defective ceria films: a study with scanning-tunneling microscopy and density-functional theory. <i>Physical Review Letters</i> , 2011 , 106, 246801	7.4	140
775	Model studies in heterogeneous catalysis. <i>Chemistry - A European Journal</i> , 2010 , 16, 9384-97	4.8	138
774	SMART: a planned ultrahigh-resolution spectromicroscope for BESSY II. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1997 , 84, 231-250	1.7	137
773	Structure Sensitivity of CO Dissociation on Rh Surfaces. <i>Catalysis Letters</i> , 2002 , 81, 153-156	2.8	135
772	Vibrational Sum Frequency Spectroscopy on Pd(111) and Supported Pd Nanoparticles: CO Adsorption from Ultrahigh Vacuum to Atmospheric Pressure <i>Journal of Physical Chemistry B</i> , 2002 , 106, 356-367	3.4	134
771	Chemisorption of CO on Co(0001). Structure and electronic properties. <i>Physical Review B</i> , 1983 , 27, 7117-7135	3.7	134
770	Identification of color centers on MgO(001) thin films with scanning tunneling microscopy. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 46-9	3.4	133
769	Preparation and characterization of model catalysts: from ultrahigh vacuum to in situ conditions at the atomic dimension. <i>Journal of Catalysis</i> , 2003 , 216, 223-235	7.3	132
768	IR investigations of CO ₂ adsorption on chromia surfaces: Cr ₂ O ₃ (0001)/Cr(110) versus polycrystalline Cr ₂ O ₃ . <i>Surface Science</i> , 1999 , 421, 176-190	1.8	132
767	Size dependence of the adsorption energy of CO on metal nanoparticles: a DFT search for the minimum value. <i>Nano Letters</i> , 2012 , 12, 2134-9	11.5	130
766	Strong relaxations at the Cr ₂ O ₃ (0001) surface as determined via low-energy electron diffraction and molecular dynamics simulations. <i>Surface Science</i> , 1997 , 372, L291-L297	1.8	130
765	Size-dependent oxidation mechanism of supported Pd nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 3693-7	16.4	130
764	Resolving the atomic structure of vanadia monolayer catalysts: monomers, trimers, and oligomers on ceria. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 8006-9	16.4	127
763	Interplay between structural, magnetic, and electronic properties in a FeO(111) ultrathin film. <i>Physical Review B</i> , 2007 , 76,	3.3	124
762	Self-organization of gold atoms on a polar FeO(111) surface. <i>Physical Review Letters</i> , 2005 , 95, 066101	7.4	124
761	EPITAXIAL GROWTH OF SiO ₂ ON Mo(112). <i>Surface Review and Letters</i> , 2000 , 07, 7-14	1.1	122
760	Adsorption and reaction on oxide surfaces: NO, NO ₂ on Cr ₂ O ₃ (111)/Cr(110). <i>Surface Science</i> , 1991 , 258, 23-34	1.8	122

- 759 Partial oxidation of ethanol on vanadia catalysts on supporting oxides with different redox properties compared to propane. *Journal of Catalysis*, **2012**, 296, 120-131 7.3 121
- 758 Quantum well states in two-dimensional gold clusters on MgO thin films. *Physical Review Letters*, **2009**, 102, 206801 7.4 121
- 757 A case of strong metal-support interactions: combining advanced microscopy and model systems to elucidate the atomic structure of interfaces. *Angewandte Chemie - International Edition*, **2014**, 53, 5998-6004 16.4 119
- 756 Encapsulation of Pt Nanoparticles as a Result of Strong Metal-Support Interaction with Fe₃O₄ (111). *Journal of Physical Chemistry C*, **2008**, 112, 10209-10213 3.8 119
- 755 Alkene chemistry on the palladium surface: nanoparticles vs single crystals. *Journal of Catalysis*, **2004**, 223, 444-453 7.3 118
- 754 Atmospheric pressure studies of selective 1,3-butadiene hydrogenation on well-defined Pd/Al₂O₃/NiAl(110) model catalysts: Effect of Pd particle size. *Journal of Catalysis*, **2006**, 240, 58-65 7.3 116
- 753 Polar surfaces of oxides: reactivity and reconstruction. *Surface Science*, **1995**, 337, 268-277 1.8 116
- 752 Explanation of the satellite structure observed in the photoemission spectra of coordinated CO. *Physical Review B*, **1981**, 23, 4859-4878 3.3 116
- 751 High-Pressure Carbon Monoxide Adsorption on Pt(111) Revisited: A Sum Frequency Generation Study. *Journal of Physical Chemistry B*, **2001**, 105, 3797-3802 3.4 115
- 750 The structure of thin NiO(100) films grown on Ni(100) as determined by low-energy-electron diffraction and scanning tunneling microscopy. *Surface Science*, **1991**, 253, 116-128 1.8 115
- 749 Oxygen-deficient line defects in an ultrathin aluminum oxide film. *Physical Review Letters*, **2006**, 97, 046104 10.1 114
- 748 On the Promoting Role of Ag in Selective Hydrogenation Reactions over Pd/Ag Bimetallic Catalysts: A Theoretical Study. *Journal of Physical Chemistry C*, **2007**, 111, 6852-6856 3.8 113
- 747 An MNDO and CNDO / S(S + DES CI) study on the structural and electronic properties of a model squaraine dye and related cyanine. *Chemical Physics*, **1986**, 107, 159-174 2.3 113
- 746 Structure-Reactivity Relationships on Supported Metal Model Catalysts: Adsorption and Reaction of Ethene and Hydrogen on Pd/Al₂O₃/NiAl(110). *Journal of Catalysis*, **2001**, 200, 330-339 7.3 112
- 745 Adsorption and Reaction on Oxide Surfaces: CO and CO₂ on Cr₂O₃(111). *Zeitschrift Fur Elektrochemie Und Elektrochemie*, **1992**, 96, 15-27 112
- 744 Charge-mediated adsorption behavior of CO on MgO-supported Au clusters. *Journal of the American Chemical Society*, **2010**, 132, 7745-9 16.4 110
- 743 Oxygen storage at the metal/oxide interface of catalyst nanoparticles. *Angewandte Chemie - International Edition*, **2005**, 44, 7601-5 16.4 110
- 742 Bridging the pressure and materials gaps between catalysis and surface science: clean and modified oxide surfaces. *Topics in Catalysis*, **2001**, 15, 201-209 2.3 110

741	TDS study of the bonding of CO and NO to vacuum-cleaved NiO(100). <i>Surface Science</i> , 1999 , 423, 90-98	1.8	110
740	Models in Catalysis. <i>Catalysis Letters</i> , 2015 , 145, 109-125	2.8	106
739	V ₂ O ₃ (0) on Au(0) and W(0): growth, termination and electronic structure. <i>Surface Science</i> , 2003 , 539, 99-112	1.8	106
738	Ultrathin oxide films on metal supports: structure-reactivity relations. <i>Annual Review of Physical Chemistry</i> , 2012 , 63, 619-33	15.7	105
737	Binding of single gold atoms on thin MgO(001) films. <i>Physical Review Letters</i> , 2006 , 96, 146804	7.4	105
736	Interaction of rhodium with hydroxylated alumina model substrates. <i>Surface Science</i> , 1997 , 384, 106-119	1.8	104
735	Alumina supported model PdAg catalysts: A combined STM, XPS, TPD and IRAS study. <i>Surface Science</i> , 2006 , 600, 1849-1853	1.8	104
734	Atomic structure of antiphase domain boundaries of a thin Al ₂ O ₃ film on NiAl(110). <i>Physical Review Letters</i> , 2003 , 91, 256101	7.4	104
733	Charging of metal adatoms on ultrathin oxide films: Au and Pd on FeO/Pt(111). <i>Physical Review Letters</i> , 2008 , 101, 026102	7.4	101
732	Photodesorption of NO from Ni(100)-O. <i>Physical Review Letters</i> , 1988 , 60, 1518-1521	7.4	101
731	Electronic and geometric structure of CO on Ni(110): Experiment and theory. <i>Surface Science</i> , 1986 , 173, 194-214	1.8	101
730	Gold supported on well-ordered ceria films: nucleation, growth and morphology in CO oxidation reaction. <i>Catalysis Letters</i> , 2007 , 114, 8-16	2.8	100
729	In situ studies of methanol decomposition and oxidation on Pd(111) by PM-IRAS and XPS spectroscopy. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 17791-4	3.4	100
728	Interaction of oxygen with palladium deposited on a thin alumina film. <i>Surface Science</i> , 2002 , 501, 270-281	1.8	100
727	Sum frequency generation vibrational spectroscopy at solid-gas interfaces: CO adsorption on Pd model catalysts at ambient pressure. <i>Surface Science</i> , 2002 , 502-503, 109-122	1.8	99
726	Electronic surface state of NiO (100). <i>Chemical Physics Letters</i> , 1993 , 210, 10-14	2.5	99
725	When the reporter induces the effect: unusual IR spectra of CO on Au ₁ /MgO(001)/Mo(001). <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 2633-5	16.4	98
724	Surface metal-insulator transition on a vanadium pentoxide (001) single crystal. <i>Physical Review Letters</i> , 2007 , 99, 226103	7.4	98

723	Surface potential of a polar oxide film: FeO on Pt(111). <i>Physical Review B</i> , 2005 , 71,	3.3	97
722	Surface Reactivity of Pd Nanoparticles Supported on Polycrystalline Substrates As Compared to Thin Film Model Catalysts: Infrared Study of CO Adsorption. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 3603-3613	3.4	96
721	Unoccupied electron band structure of Na overlayers on Al(111). <i>Physical Review B</i> , 1987 , 36, 1276-1279	3.3	96
720	CO ₂ adsorption and reaction on Fe(111): An angle resolved photoemission (ARUPS) study. <i>Surface Science</i> , 1987 , 180, 550-564	1.8	96
719	Formation of a faceted MoO ₂ epilayer on Mo(1 1 2) studied by XPS, UPS and STM. <i>Surface Science</i> , 2004 , 552, 85-97	1.8	94
718	Thermodesorption of CO and NO from Vacuum-Cleaved NiO(100) and MgO(100). <i>Physica Status Solidi A</i> , 1999 , 173, 93-100		94
717	Controlling the charge state of supported nanoparticles in catalysis: lessons from model systems. <i>Chemical Society Reviews</i> , 2018 , 47, 8474-8502	58.5	93
716	Thin silica films on Ru(0001): monolayer, bilayer and three-dimensional networks of [SiO ₄] tetrahedra. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 11344-51	3.6	93
715	Activation of oxygen on MgO: O ₂ ⁻ radical ion formation on thin, metal-supported MgO(001) films. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 2635-8	16.4	91
714	Temperature-Dependent Morphology, Magnetic and Optical Properties of Li-Doped MgO. <i>ChemCatChem</i> , 2010 , 2, 854-862	5.2	91
713	Tailoring the shape of metal ad-particles by doping the oxide support. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 11525-7	16.4	90
712	Measuring the charge state of point defects on MgO/Ag(001). <i>Journal of the American Chemical Society</i> , 2009 , 131, 17544-5	16.4	90
711	The structure of Pt-aggregates on a supported thin aluminum oxide film in comparison with unsupported alumina: a transmission electron microscopy study. <i>Surface Science</i> , 1997 , 391, 27-36	1.8	90
710	Counting electrons transferred through a thin alumina film into Au chains. <i>Physical Review Letters</i> , 2008 , 100, 096802	7.4	90
709	Preparation and characterization of a model bimetallic catalyst: Co-Pd nanoparticles supported on Al ₂ O ₃ . <i>Angewandte Chemie - International Edition</i> , 2002 , 41, 4073-6	16.4	88
708	Adsorption and reaction of methanol on supported palladium catalysts: microscopic-level studies from ultrahigh vacuum to ambient pressure conditions. <i>Physical Chemistry Chemical Physics</i> , 2007 , 9, 3541-58	3.6	87
707	Ferryl (Fe=O) termination of the hematite alpha-Fe ₂ O ₃ (0001) surface. <i>Physical Review Letters</i> , 2005 , 94, 166101	7.4	87
706	Modeling zeolites with metal-supported two-dimensional aluminosilicate films. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 6005-8	16.4	86

705	Study of CO adsorption on crystalline-silica-supported palladium particles. <i>Surface Science</i> , 2002 , 498, L71-L77	1.8	86
704	Oxidation of Au by surface OH: nucleation and electronic structure of gold on hydroxylated MgO(001). <i>Journal of the American Chemical Society</i> , 2011 , 133, 10668-76	16.4	85
703	Isomerization and Hydrogenation of cis-2-Butene on Pd Model Catalyst. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 11408-11420	3.8	85
702	Donor characteristics of transition-metal-doped oxides: Cr-doped MgO versus Mo-doped CaO. <i>Journal of the American Chemical Society</i> , 2012 , 134, 11380-3	16.4	84
701	XPEEM WITH ENERGY-FILTERING: ADVANTAGES AND FIRST RESULTS FROM THE SMART PROJECT. <i>Surface Review and Letters</i> , 2002 , 09, 223-232	1.1	84
700	Methanol Dehydrogenation and Formation of Carbonaceous Overlayers on Pd(111) Studied by High-Pressure SFG and XPS Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 12955-12961	3.4	82
699	High-Pressure Studies of CO Adsorption on Pd(111) by X-ray Photoelectron Spectroscopy and Sum-Frequency Generation. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 3522-3527	3.4	82
698	The Growth and Properties of Pd and Pt on Al ₂ O ₃ /NiAl(110). <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1995 , 99, 1381-1386		82
697	Oxygen-Induced Transformations of an FeO(111) Film on Pt(111): A Combined DFT and STM Study. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 21504-21509	3.8	81
696	Crystalline-vitreous interface in two dimensional silica. <i>Physical Review Letters</i> , 2012 , 109, 106101	7.4	81
695	Morphological and electronic properties of ultrathin crystalline silica epilayers on a Mo(112) substrate. <i>Physical Review B</i> , 2002 , 66,	3.3	81
694	Adsorption and reaction of CO ₂ on Ni{110}: X-ray photoemission, near-edge X-ray absorption fine-structure and diffuse leed studies. <i>Surface Science</i> , 1988 , 206, 1-19	1.8	81
693	Morphology and optical properties of MgO thin films on Mo(001). <i>Chemical Physics Letters</i> , 2006 , 430, 330-335	2.5	80
692	The Structure and Reactivity of Al ₂ O ₃ -Supported Cobalt/Palladium Particles: A CO-TPD, STM, and XPS Study. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 778-785	3.4	79
691	Surface-bonded precursor determines particle size effects for alkene hydrogenation on palladium. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 629-31	16.4	79
690	Model Catalyst Studies on Vanadia Particles Deposited onto a Thin-Film Alumina Support. 1. Structural Characterization. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 8756-8761	3.4	79
689	Correlation between electron loss and inverse photoemission measurements of alkali metals on metal surfaces. <i>Physical Review B</i> , 1988 , 37, 10387-10390	3.3	79
688	Structures of the Ordered Water Monolayer on MgO(001). <i>Journal of Physical Chemistry C</i> , 2011 , 115, 6764-6774	3.8	78

687	Finite size effects on supported Pd nanoparticles: Interaction of hydrogen with CO and C ₂ H ₄ . <i>Surface Science</i> , 2005 , 588, L209-L219	1.8	78
686	Metal-oxide interaction for metal clusters on a metal-supported thin alumina film. <i>Surface Science</i> , 1999 , 442, L964-L970	1.8	78
685	The adsorption of N ₂ on Fe(111): Angle resolved photoemission and theoretical model studies. <i>Surface Science</i> , 1987 , 185, 187-202	1.8	78
684	Nature of active sites in Ni ₂ P hydrotreating catalysts as probed by iron substitution. <i>Applied Catalysis B: Environmental</i> , 2015 , 164, 204-216	21.8	77
683	Hydrogen absorption in oxide-supported palladium nanocrystals. <i>Physical Review B</i> , 2008 , 77,	3.3	77
682	A molecular beam/surface spectroscopy apparatus for the study of reactions on complex model catalysts. <i>Review of Scientific Instruments</i> , 2000 , 71, 4395	1.7	77
681	Toward an Understanding of Selective Alkyne Hydrogenation on Ceria: On the Impact of O Vacancies on H Interaction with CeO(111). <i>Journal of the American Chemical Society</i> , 2017 , 139, 17608-17616	16.4	76
680	Subsurface Hydrogen Diffusion into Pd Nanoparticles: Role of Low-Coordinated Surface Sites and Facilitation by Carbon. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 3539-3544	3.8	76
679	Ultrathin silica films on metals: the long and winding road to understanding the atomic structure. <i>Advanced Materials</i> , 2013 , 25, 49-67	24	76
678	Particle size dependent adsorption and reaction kinetics on reduced and partially oxidized Pd nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2007 , 9, 1347-61	3.6	76
677	Particle-size dependent heats of adsorption of CO on supported Pd nanoparticles as measured with a single-crystal microcalorimeter. <i>Physical Review B</i> , 2010 , 81,	3.3	75
676	On the thermal stability of metal particles supported on a thin alumina film. <i>Surface Science</i> , 2003 , 523, 103-110	1.8	75
675	Construction of 2D atomic crystals on transition metal surfaces: graphene, silicene, and hafnene. <i>Small</i> , 2014 , 10, 2215-25	11	74
674	Support effects on the atomic structure of ultrathin silica films on metals. <i>Applied Physics Letters</i> , 2012 , 100, 151608	3.4	74
673	Tuning the electronic structure of ultrathin crystalline silica films on Ru(0001). <i>Physical Review B</i> , 2012 , 85,	3.3	74
672	Particle size dependent CO dissociation on alumina-supported Rh: a model study. <i>Chemical Physics Letters</i> , 1997 , 279, 92-99	2.5	74
671	Photon Emission Spectroscopy of Single Oxide-Supported Ag-Au Alloy Clusters. <i>Physical Review B</i> , 2005 , 72,	3.3	74
670	The interaction of oxygen with alumina-supported palladium particles. <i>Catalysis Letters</i> , 2001 , 71, 5-13	2.8	74

669	Die CO-Oxidation als Modellreaktion für heterogene Prozesse. <i>Angewandte Chemie</i> , 2011 , 123, 10242-10275	3.6	73
668	Adsorption von Gasen an komplexen Festkörperoberflächen. <i>Angewandte Chemie</i> , 1997 , 109, 444-468	3.6	73
667	Adsorption on a polar oxide surface: O ₂ , C ₂ H ₄ and Na on Cr ₂ O ₃ (0001)/Cr(110). <i>Faraday Discussions</i> , 1996 , 105, 295-315	3.6	73
666	Ultrahigh vacuum and high-pressure coadsorption of CO and H ₂ on Pd(111): A combined SFG, TDS, and LEED study. <i>Journal of Chemical Physics</i> , 2003 , 119, 10853-10866	3.9	72
665	CO adsorption on Ni(100) and Pt(111) studied by infrared-visible sum frequency generation spectroscopy: design and application of an SFG-compatible UHV-high-pressure reaction cell. <i>Topics in Catalysis</i> , 2001 , 15, 19-26	2.3	72
664	Nucleation and growth of transition metals on a thin alumina film. <i>Surface Science</i> , 2000 , 454-456, 957-962	2.3	72
663	The CO oxidation kinetics on supported Pd model catalysts: A molecular beam/in situ time-resolved infrared reflection absorption spectroscopy study. <i>Journal of Chemical Physics</i> , 2001 , 114, 4669	3.9	72
662	Carbon dioxide activation and reaction induced by electron transfer at an oxide-metal interface. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 12484-7	16.4	71
661	Atmospheric pressure studies of selective 1,3-butadiene hydrogenation on Pd single crystals: effect of CO addition. <i>Journal of Catalysis</i> , 2005 , 235, 52-59	7.3	71
660	Bimodal velocity distributions after ultraviolet-laser-induced desorption of NO from oxide surfaces. Experiments and results of model calculations. <i>Journal of Chemical Physics</i> , 1992 , 96, 7108-7116	3.9	71
659	Atomic Arrangement in Two-Dimensional Silica: From Crystalline to Vitreous Structures. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 20426-20432	3.8	70
658	CO Adsorption on Monometallic and Bimetallic Au/Pd Nanoparticles Supported on Oxide Thin Films. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 17099-17104	3.8	70
657	Influence of substrate morphology on organic layer growth: PTCDA on Ag(111). <i>Chemical Physics</i> , 2006 , 325, 178-184	2.3	70
656	Vanadium oxide surfaces and supported vanadium oxide nanoparticles. <i>Topics in Catalysis</i> , 2006 , 38, 117-125	2.3	70
655	Adsorption of CO and NO on NiO and CoO: a comparison. <i>Surface Science</i> , 1996 , 347, 337-345	1.8	70
654	Double aberration correction in a low-energy electron microscope. <i>Ultramicroscopy</i> , 2010 , 110, 1358-61	3.1	69
653	SMART: An Aberration-Corrected XPEEM/LEEM with Energy Filter. <i>Surface Review and Letters</i> , 1998 , 05, 1249-1256	1.1	69
652	Influence of Multielectron Excitations on the Band Structure of Adsorbate Overlayers. <i>Physical Review Letters</i> , 1983 , 50, 768-771	7.4	69

651	Unprecedented selectivity to the direct desulfurization (DDS) pathway in a highly active FeNi bimetallic phosphide catalyst. <i>Journal of Catalysis</i> , 2012 , 285, 1-5	7.3	68
650	A comparison of surface electron spectroscopies. <i>Surface Science</i> , 1985 , 158, 58-83	1.8	68
649	Relating methanol oxidation to the structure of ceria-supported vanadia monolayer catalysts. <i>Journal of Catalysis</i> , 2010 , 272, 82-91	7.3	67
648	Adsorption, activation, and dissociation of oxygen on doped oxides. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 11385-7	16.4	66
647	Theoretical Investigation of Laser Induced Desorption of Small Molecules from Oxide Surfaces: A First Principles Study. <i>Physical Review Letters</i> , 1998 , 80, 5208-5211	7.4	66
646	Structural rearrangement and surface magnetism on oxide surfaces: a temperature-dependent low-energy electron diffraction-electron energy loss spectroscopy study of Cr ₂ O ₃ (111)/Cr(110). <i>Journal of Physics Condensed Matter</i> , 1995 , 7, 5289-5301	1.8	66
645	Influence of alkali co-adsorption on the adsorption and reaction of CO ₂ on Pd(111). <i>Surface Science</i> , 1989 , 209, 159-172	1.8	66
644	CO oxidation on partially oxidized Pd nanoparticles. <i>Journal of Catalysis</i> , 2006 , 242, 58-70	7.3	65
643	Unusual state of adsorbed CO: CO(sqrt 3 x sqrt 3)R30 degrees /Cr ₂ O ₃ (111). <i>Physical Review Letters</i> , 1991 , 67, 3551-3554	7.4	65
642	The electronic structure of adsorbed aromatic molecules: Perylene and PTCDA on Si(111) and Ag(111). <i>Journal of Molecular Structure</i> , 1993 , 293, 239-244	3.4	65
641	Characterizing low-coordinated atoms at the periphery of MgO-supported Au islands using scanning tunneling microscopy and electronic structure calculations. <i>Physical Review B</i> , 2010 , 81,	3.3	64
640	From Pd nanoparticles to single crystals: 1,3-butadiene hydrogenation on well-defined model catalysts. <i>Chemical Communications</i> , 2006 , 80-2	5.8	64
639	Influence of the metal substrate on the adsorption properties of thin oxide layers: Au atoms on a thin alumina film on NiAl(110). <i>Physical Review Letters</i> , 2006 , 96, 036103	7.4	64
638	Sum frequency generation and density functional studies of COH interaction and hydrogen bulk dissolution on Pd(111). <i>Surface Science</i> , 2004 , 554, 43-59	1.8	64
637	Determination of atomic structure of the metal-oxide interface: Pd nanodeposits on an FeO(111) film. <i>Physical Review Letters</i> , 2003 , 91, 076102	7.4	64
636	Metal Atoms and Particles on Oxide Supports: Probing Structure and Charge by Infrared Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 8569-8576	3.4	64
635	Charge-induced formation of linear Au clusters on thin MgO films: Scanning tunneling microscopy and density-functional theory study. <i>Physical Review B</i> , 2008 , 78,	3.3	63
634	Oxygen-induced Restructuring of a Pd/Fe ₃ O ₄ Model Catalyst. <i>Catalysis Letters</i> , 2006 , 107, 189-196	2.8	63

633	The influence of OH groups on the growth of rhodium on alumina: a model study. <i>Catalysis Letters</i> , 2000 , 68, 19-24	2.8	63
632	Adsorption on oxide surfaces: structure and dynamics. <i>Surface Science</i> , 1994 , 307-309, 1148-1160	1.8	63
631	UV-laser-induced photodesorption of NO from NiO. <i>Surface Science</i> , 1989 , 218, 467-493	1.8	63
630	Reactivity of Ultra-Thin ZnO Films Supported by Ag(111) and Cu(111): A Comparison to ZnO/Pt(111). <i>Catalysis Letters</i> , 2014 , 144, 648-655	2.8	62
629	The Surface Science of Catalysis and More, Using Ultrathin Oxide Films as Templates: A Perspective. <i>Journal of the American Chemical Society</i> , 2016 , 138, 8985-96	16.4	62
628	Interaction of Probe Molecules with Bridging Hydroxyls of Two-Dimensional Zeolites: A Surface Science Approach. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 13547-13556	3.8	61
627	Adsorption of molecular and atomic hydrogen on vacuum-cleaved V ₂ O ₅ (0). <i>Surface Science</i> , 2002 , 496, 64-72	1.8	61
626	Temperature-Dependent Ultraviolet Photoemission Linewidths of Molecular Solids: Isopropyl Benzene. <i>Physical Review Letters</i> , 1980 , 45, 280-283	7.4	61
625	Trends in the binding strength of surface species on nanoparticles: how does the adsorption energy scale with the particle size?. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 5175-9	16.4	60
624	Au dimers on thin MgO(001) films: flat and charged or upright and neutral?. <i>Journal of the American Chemical Society</i> , 2008 , 130, 7814-5	16.4	60
623	Spectators Control Selectivity in Surface Chemistry: Acrolein Partial Hydrogenation Over Pd. <i>Journal of the American Chemical Society</i> , 2015 , 137, 13496-502	16.4	59
622	Gold Supported on Oxide Surfaces: Environmental Effects as Studied by STM. <i>Topics in Catalysis</i> , 2005 , 36, 33-41	2.3	59
621	Calculation of transition metal compounds using an extension of the CNDO formalism. <i>Theoretica Chimica Acta</i> , 1979 , 51, 145-162		59
620	Interconversion of γ -Fe ₂ O ₃ and Fe ₃ O ₄ Thin Films: Mechanisms, Morphology, and Evidence for Unexpected Substrate Participation. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 29068-29076	3.8	58
619	Atomic structure of a thin silica film on a Mo(112) substrate: A combined experimental and theoretical study. <i>Physical Review B</i> , 2006 , 73,	3.3	58
618	Structural Investigation of Palladium Clusters on γ -Al ₂ O ₃ (111)/NiAl(110) with Transmission Electron Microscopy. <i>Langmuir</i> , 1999 , 15, 5309-5313	4	58
617	Promoter action of alkali in the activation of CO ₂ on Pd(111): A HREELS case study. <i>Surface Science</i> , 1989 , 220, 243-252	1.8	58
616	On the separation of initial and final state effects in photoelectron spectroscopy using an extension of the auger-parameter concept. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1985 , 37, 209-224	1.7	58

615	Oxidation of Reduced Ceria by Incorporation of Hydrogen. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 14686-14693	16.4	57
614	Infrared study of CO adsorption on alumina supported palladium particles. <i>Surface Science</i> , 1998 , 402-404, 428-432	1.8	57
613	Catalysis and surface science: What do we learn from studies of oxide-supported cluster model systems?. <i>Advances in Catalysis</i> , 2000 , 45, 333-384	2.4	57
612	Enhanced stability of gold clusters supported on hydroxylated MgO(001) surfaces. <i>Journal of the American Chemical Society</i> , 2010 , 132, 4064-5	16.4	56
611	Formaldehyde formation on vanadium oxide surfaces V ₂ O ₃ (0001) and V ₂ O ₅ (001): how does the stable methoxy intermediate form?. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 3695-8	16.4	56
610	Promotional effect of metal encapsulation on reactivity of iron oxide supported Pt catalysts. <i>Applied Catalysis A: General</i> , 2011 , 391, 407-410	5.1	56
609	Probing adsorption sites on thin oxide films by dynamic force microscopy. <i>Applied Physics Letters</i> , 2006 , 89, 263107	3.4	56
608	Bulk and surface oxygen vacancy formation and diffusion in single crystals, ultrathin films, and metal grown oxide structures. <i>Journal of Chemical Physics</i> , 2006 , 125, 074711	3.9	56
607	Reaction Kinetics on Heterogeneous Model Catalysts. <i>Journal of Catalysis</i> , 2001 , 204, 378-392	7.3	56
606	Vibrational spectroscopy of CO adsorbed on supported ultra-small transition metal particles and single metal atoms. <i>Surface Science</i> , 2000 , 454-456, 968-973	1.8	56
605	Formation of one-dimensional electronic states along the step edges of CeO ₂ (111). <i>ACS Nano</i> , 2012 , 6, 1126-33	16.7	55
604	Electron trapping in misfit dislocations of MgO thin films. <i>Physical Review B</i> , 2010 , 81,	3.3	55
603	Double quartz tuning fork sensor for low temperature atomic force and scanning tunneling microscopy. <i>Review of Scientific Instruments</i> , 2004 , 75, 2446-2450	1.7	55
602	Surface science approach to catalyst preparation [Pd deposition onto thin Fe ₃ O ₄ (111) films from PdCl ₂ precursor. <i>Journal of Catalysis</i> , 2012 , 286, 1-5	7.3	54
601	Two-dimensional silica: Crystalline and vitreous. <i>Chemical Physics Letters</i> , 2012 , 550, 1-7	2.5	54
600	An improved single crystal adsorption calorimeter for determining gas adsorption and reaction energies on complex model catalysts. <i>Review of Scientific Instruments</i> , 2011 , 82, 024102	1.7	54
599	CO dissociation characteristics on size-distributed rhodium islands on alumina model substrates. <i>Journal of Chemical Physics</i> , 1998 , 108, 2967-2974	3.9	54
598	Adsorption of water on thin V ₂ O ₃ (0 0 0 1) films. <i>Surface Science</i> , 2006 , 600, 1040-1047	1.8	54

597	First experimental proof for aberration correction in XPEEM: resolution, transmission enhancement, and limitation by space charge effects. <i>Ultramicroscopy</i> , 2013 , 126, 23-32	3.1	53
596	Effect of Carbon Deposits on Reactivity of Supported Pd Model Catalysts. <i>Catalysis Letters</i> , 2002 , 80, 115-122	2.8	53
595	Complex model catalysts under UHV and high pressure conditions: CO adsorption and oxidation on alumina-supported Pd particles. <i>Journal of Molecular Catalysis A</i> , 2000 , 162, 51-66		53
594	Adsorption and reaction of molecules on surfaces of metal-metal oxide systems. <i>Journal of Molecular Catalysis</i> , 1993 , 82, 143-169		53
593	Photoemission from ordered physisorbed adsorbate phases: N ₂ on graphite and CO on Ag(111). <i>Physical Review Letters</i> , 1985 , 54, 2095-2098	7.4	53
592	Selectivity in Methanol Oxidation as Studied on Model Systems Involving Vanadium Oxides. <i>Topics in Catalysis</i> , 2008 , 50, 106-115	2.3	52
591	The influence of surface defects on methanol decomposition on Pd(111) studied by XPS and PM-IRAS. <i>Surface Science</i> , 2004 , 566-568, 740-745	1.8	52
590	Structural characterization of a model catalyst: Pt/Al ₂ O ₃ /NiAl(110). <i>Surface Science</i> , 1995 , 331-333, 1515-1519	1.85	52
589	Dynamical studies of UV-laser-induced NO-desorption from the polar NiO(111) versus the nonpolar NiO(100) surfaces. <i>Journal of Chemical Physics</i> , 1994 , 101, 3318-3325	3.9	52
588	CO ₂ activation and reaction with hydrogen on Ni(110): formate formation. <i>Chemical Physics Letters</i> , 1991 , 184, 239-244	2.5	52
587	A fresh look at an old nano-technology: catalysis. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 8148-67	3.6	51
586	Titration of Ce ³⁺ ions in the CeO ₂ (111) surface by Au adatoms. <i>Physical Review Letters</i> , 2013 , 111, 206101	1.4	51
585	The Interplay between Structure and CO Oxidation Catalysis on Metal-Supported Ultrathin Oxide Films. <i>Angewandte Chemie</i> , 2010 , 122, 4520-4523	3.6	51
584	Vibrational structure of excited states of molecules on oxide surfaces. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1993 , 64-65, 217-225	1.7	51
583	Water Interaction with Iron Oxides. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 13942-6	16.4	50
582	Low temperature adsorption of oxygen on reduced V ₂ O ₃ (0001) surfaces. <i>Surface Science</i> , 2006 , 600, 1497-1503	1.8	50
581	Atomic resolution on MgO(001) by atomic force microscopy using a double quartz tuning fork sensor at low-temperature and ultrahigh vacuum. <i>Applied Physics Letters</i> , 2005 , 87, 083104	3.4	50
580	Structure investigation of the topmost layer of a thin ordered alumina film grown on NiAl(1 1 0) by low temperature scanning tunneling microscopy. <i>Chemical Physics Letters</i> , 2002 , 359, 41-47	2.5	50

579	Size Dependent Reaction Kinetics on Supported Model Catalysts: A Molecular Beam/IRAS Study of the CO Oxidation on Alumina-Supported Pd Particles. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 3567-3576	3.4	50
578	π -d backbonding band dispersion and final-state effects for the (2 x 1) p2mg phase of CO on Ni(110). <i>Physical Review B</i> , 1989 , 39, 3475-3488	3.3	50
577	An XPS study of intensity borrowing in core ionization of free and coordinated CO. <i>Journal of Chemical Physics</i> , 1981 , 75, 4275-4284	3.9	50
576	Permeation of a Single-Layer SiO ₂ Membrane and Chemistry in Confined Space. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 29034-29042	3.8	49
575	Thickness-Dependent Hydroxylation of MgO(001) Thin Films. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 18207-18214	3.8	49
574	Defects and inhomogeneities in Fe ₃ O ₄ (111) thin film growth on Pt(111). <i>Physical Review B</i> , 2012 , 86,	3.3	49
573	Well-Ordered V ₂ O ₅ (001) Thin Films on Au(111): Growth and Thermal Stability. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 11835-11846	3.8	49
572	Formation of interface and surface oxides on supported Pd nanoparticles. <i>Surface Science</i> , 2006 , 600, 2528-2542	1.8	49
571	Cluster, facets, and edges: site-dependent selective chemistry on model catalysts. <i>Chemical Record</i> , 2003 , 3, 181-201	6.6	49
570	Oxygen-induced p(2x1) reconstruction on Mo(112) studied by LEED and STM. <i>Physical Review B</i> , 2002 , 65,	3.3	49
569	Electronic structure of pyrrole-based conducting polymers: An electron-energy-loss-spectroscopy study. <i>Physical Review B</i> , 1986 , 34, 1101-1115	3.3	49
568	π -electron delocalization in poly(p-phenylene), poly(p-phenylenesulfide), and poly(p-phenyleneoxide). <i>Physical Review B</i> , 1983 , 28, 1802-1808	3.3	49
567	CO oxidation over ZnO films on Pt(1 1 1) at near-atmospheric pressures. <i>Journal of Catalysis</i> , 2013 , 301, 227-232	7.3	48
566	Electron Spin Resonance Investigations of the Molecular Motion of NO ₂ on Al ₂ O ₃ (111) under Ultrahigh Vacuum Conditions. <i>Physical Review Letters</i> , 1995 , 74, 761-764	7.4	48
565	CO on NiO(100): orientation and bonding. <i>Surface Science</i> , 1995 , 325, L421-L427	1.8	48
564	Model Studies in Catalysis. <i>Topics in Catalysis</i> , 2011 , 54, 4-12	2.3	47
563	Electron paramagnetic resonance and scanning tunneling microscopy investigations on the formation of F(+) and F(0) Color centers on the surface of thin MgO(001) films. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 8665-9	3.4	47
562	A double lamellae dropoff etching procedure for tungsten tips attached to tuning fork atomic force microscopy/scanning tunneling microscopy sensors. <i>Review of Scientific Instruments</i> , 2003 , 74, 1027-1030 ⁴⁷	1.7	47

561	Adsorbate-induced restructuring and pressure-dependent adsorption on metal nanoparticles studied by electron microscopy and sum frequency generation spectroscopy. <i>Topics in Catalysis</i> , 2000 , 14, 3-14	2.3	47
560	Calculation of transition metal compounds using an extension of the CNDO formalism. <i>Surface Science</i> , 1980 , 95, 527-554	1.8	47
559	Transmission electron microscopic investigation of an ordered Al ₂ O ₃ film on NiAl(110). <i>Surface Science</i> , 1997 , 385, 66-76	1.8	46
558	On the geometrical and electronic structure of an ultra-thin crystalline silica film grown on Mo(112). <i>Surface Science</i> , 2007 , 601, 4849-4861	1.8	46
557	Phonons of clean and metal-modified oxide films: an infrared and HREELS study. <i>Surface Science</i> , 2001 , 492, 270-284	1.8	46
556	Motor analysis predicts progression in HIV-associated brain disease. <i>Journal of the Neurological Sciences</i> , 1994 , 123, 180-5	3.2	46
555	Dynamic effects in VUV- and XUV-Spectroscopy of Organic Molecular Solids. <i>Physica Scripta</i> , 1987 , T17, 50-63	2.6	46
554	Role of low-coordinated surface sites in olefin hydrogenation: a molecular beam study on Pd nanoparticles and Pd(111). <i>ChemPhysChem</i> , 2010 , 11, 2319-22	3.2	45
553	Growth and morphology of Rh deposits on an alumina film under UHV conditions and under the influence of CO. <i>Surface Science</i> , 1997 , 391, 204-215	1.8	45
552	Fischer-Tropsch synthesis on anchored Co/Nb ₂ O ₅ /Al ₂ O ₃ catalysts: the nature of the surface and the effect on chain growth. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 9155-63	3.4	45
551	Metal deposition in adsorbate atmosphere: growth and decomposition of a palladium carbonyl-like species. <i>Surface Science</i> , 1996 , 346, 108-126	1.8	45
550	Interaction of O ₂ with WC(0001). <i>Surface Science</i> , 1998 , 409, 199-206	1.8	44
549	Characterization of a PdBe bimetallic model catalyst. <i>Surface Science</i> , 2007 , 601, 2105-2116	1.8	44
548	Adsorption of NO on an oxygen precovered Ni(100) surface. <i>Surface Science</i> , 1990 , 233, 44-58	1.8	44
547	Towards Realistic Surface Science Models of Heterogeneous Catalysts: Influence of Support Hydroxylation and Catalyst Preparation Method. <i>Catalysis Letters</i> , 2013 , 143, 375-385	2.8	43
546	Analysis of the broadening of X-ray photoelectron spectroscopy peaks for ionic crystals. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 10174-7	16.4	43
545	Model Systems in Heterogeneous Catalysis: Selectivity Studies at the Atomic Level. <i>Topics in Catalysis</i> , 2008 , 48, 137-144	2.3	43
544	C-O bond scission on defect-rich and perfect Pd(111)?. <i>Surface Science</i> , 2004 , 566-568, 1024-1029	1.8	43

543	Reaction Kinetics on Complex Model Catalysts under Single Scattering Conditions. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 4901-4915	3.4	43
542	High Resolution XPS Study of a Thin Cr ₂ O ₃ (111) Film Grown on Cr(110). <i>Surface Science Spectra</i> , 1996 , 4, 246-252	1.2	43
541	Enhanced CO Oxidation on the Oxide/Metal Interface: From Ultra-High Vacuum to Near-Atmospheric Pressures. <i>ChemCatChem</i> , 2015 , 7, 2620-2627	5.2	42
540	Model oxide-supported metal catalysts--comparison of ultrahigh vacuum and solution based preparation of Pd nanoparticles on a single-crystalline oxide substrate. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 11525-33	3.6	42
539	When an Encapsulating Oxide Layer Promotes Reaction on Noble Metals: Dewetting and In situ Formation of an Inverted FeO _x /Pt Catalyst. <i>Catalysis Letters</i> , 2008 , 126, 31-35	2.8	42
538	NO on α -Fe ₂ O ₃ : hydroxyl assisted adsorption. <i>Surface Science</i> , 1995 , 325, 163-168	1.8	42
537	Metallic-to-nonmetallic transition of Na coadsorbed with CO ₂ and H ₂ O on the Cr ₂ O ₃ (111)/Cr(110) surface. <i>Physical Review B</i> , 1992 , 46, 12892-12895	3.3	42
536	UV laser-stimulated resonant desorption from metal surfaces: NO/Ni(100). <i>Chemical Physics Letters</i> , 1987 , 136, 106-113	2.5	42
535	Interpretation of the N 1s photoelectron spectra of chemisorbed N ₂ in terms of local molecule-metal interactions. <i>Physical Review B</i> , 1985 , 31, 4848-4853	3.3	42
534	Ultrathin silica films: the atomic structure of two-dimensional crystals and glasses. <i>Chemistry - A European Journal</i> , 2014 , 20, 9176-83	4.8	41
533	Scanning tunneling microscopy evidence for the Mars-van Krevelen type mechanism of low temperature CO oxidation on an FeO(1 1 1) film on Pt(1 1 1). <i>Catalysis Today</i> , 2012 , 181, 52-55	5.3	41
532	Femtosecond photodesorption of small molecules from surfaces: a theoretical investigation from first principles. <i>Physical Review Letters</i> , 2003 , 90, 117601	7.4	41
531	Characterization of a model Ziegler-Natta catalyst for ethylene polymerization. <i>Journal of Chemical Physics</i> , 2002 , 116, 10861-10868	3.9	41
530	Oxide-supported Rh particle structure probed with carbon monoxide. <i>Surface Science</i> , 1999 , 427-428, 288-293	1.8	41
529	Shake-up phenomena in D ₂ /Ar ₂ structures: A CNDO/S equivalent-core study on N,N-dimethyl-p-nitroaniline in the vapor and condensed phases. <i>Chemical Physics</i> , 1981 , 55, 407-427	2.3	41
528	Cooperative Formation of Long-Range Ordering in Water Ad-layers on Fe O (111) Surfaces. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 1409-1413	16.4	41
527	Activating Nonreducible Oxides via Doping. <i>Accounts of Chemical Research</i> , 2015 , 48, 1532-9	24.3	40
526	Adsorption energetics of CO on supported Pd nanoparticles as a function of particle size by single crystal microcalorimetry. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 16800-10	3.6	40

525	CO adsorption and dissociation on iron oxide supported Pt particles. <i>Surface Science</i> , 2009 , 603, 3099-3103	4.0	40
524	Partial oxidation of methanol on well-ordered V(2)O(5)(001)/Au(111) thin films. <i>Physical Chemistry Chemical Physics</i> , 2009 , 11, 3290-9	3.6	40
523	Formation of an Ordered Ice Layer on a Thin Silica Film. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 759-764	4.8	40
522	Initial and final state contributions to binding-energy shifts due to lattice strain: Validation of Auger parameter analyses. <i>Chemical Physics Letters</i> , 2006 , 420, 42-46	2.5	40
521	Alumina-supported vanadium nanoparticles: structural characterization and CO adsorption properties. <i>Journal of the American Chemical Society</i> , 2004 , 126, 3616-26	16.4	40
520	Adsorption of CO on Cr2O3(0 0 0 1). <i>Surface Science</i> , 2001 , 479, 11-25	1.8	40
519	Patterned defect structures predicted for graphene are observed on single-layer silica films. <i>Nano Letters</i> , 2013 , 13, 4422-7	11.5	39
518	STM Luminescence Spectroscopy of Intrinsic Defects in ZnO(0001) Thin Films. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 3972-3976	6.4	39
517	Growth and Morphology of Calcium-Oxide Films Grown on Mo(001). <i>Journal of Physical Chemistry C</i> , 2011 , 115, 8784-8789	3.8	39
516	Enhanced photoinduced desorption from metal nanoparticles by photoexcitation of confined hot electrons using femtosecond laser pulses. <i>Physical Review Letters</i> , 2011 , 107, 047401	7.4	39
515	Transition from a molecular to a metallic adsorbate system: Core-hole creation and decay dynamics for CO coordinated to Pd. <i>Physical Review B</i> , 1997 , 55, 7233-7243	3.3	39
514	Interaction of CO molecules with surface state electrons on Ag(111). <i>Surface Science</i> , 2005 , 590, L253-L258	5.8	39
513	Single crystalline silicon dioxide films on Mo(1 1 2). <i>Solid-State Electronics</i> , 2001 , 45, 1471-1478	1.7	39
512	On energy transfer processes at cluster-oxide interfaces: silver on titania. <i>Chemical Physics Letters</i> , 2001 , 349, 351-357	2.5	39
511	Experiments on individual alumina-supported adatoms and clusters. <i>Progress in Surface Science</i> , 2001 , 67, 99-121	6.6	39
510	Rotational alignment in the UV-laser induced desorption of CO from Cr2O3(0001). <i>Chemical Physics Letters</i> , 1996 , 256, 641-648	2.5	39
509	Two-dimensional state resolved imaging after UV-laser induced desorption: NO/NiO(111). <i>Surface Science</i> , 1994 , 316, 103-111	1.8	39
508	Electronic surface states of CoO(100): an electron energy loss study. <i>Chemical Physics Letters</i> , 1995 , 240, 205-209	2.5	39

507	Structural Transformations of Zinc Oxide Layers on Pt(111). <i>Journal of Physical Chemistry C</i> , 2014 , 118, 28725-28729	3.8	38
506	Adsorption of Au and Pd on Ruthenium-Supported Bilayer Silica. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 20959-20969	3.8	38
505	Ceria Nanocrystals Exposing Wide (100) Facets: Structure and Polarity Compensation. <i>Advanced Materials Interfaces</i> , 2014 , 1, 1400404	4.6	38
504	The complex core level spectra of CeO ₂ : An analysis in terms of atomic and charge transfer effects. <i>Chemical Physics Letters</i> , 2010 , 487, 237-240	2.5	38
503	Steuern Größenquantisierungseffekte die CO-Adsorption auf Au-Nanopartikeln?. <i>Angewandte Chemie</i> , 2004 , 116, 121-124	3.6	38
502	Surface structure of CoPd bimetallic particles supported on Al ₂ O ₃ thin films studied using infrared reflection absorption spectroscopy of CO. <i>Journal of Chemical Physics</i> , 2003 , 119, 10885-10894	3.9	38
501	Interaction of Water with the CaO(001) Surface. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 5565-5576	3.8	38
500	Model Approach in Heterogeneous Catalysis: Kinetics and Thermodynamics of Surface Reactions. <i>Accounts of Chemical Research</i> , 2015 , 48, 2775-82	24.3	37
499	A Large-Area Transferable Wide Band Gap 2D Silicon Dioxide Layer. <i>ACS Nano</i> , 2016 , 10, 7982-9	16.7	37
498	Size effects in thermal and photochemistry of (NO) ₂ on Ag nanoparticles. <i>Physical Review Letters</i> , 2008 , 101, 146103	7.4	37
497	Oxidation, Reduction, and Reactivity of Supported Pd Nanoparticles: Mechanism and Microkinetics. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 938-949	3.8	37
496	Synthesis and structure of ultrathin aluminosilicate films. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 7636-9	16.4	37
495	Model studies on heterogeneous catalysts at the atomic level. <i>Catalysis Today</i> , 2005 , 100, 3-9	5.3	37
494	Tip influence on plasmon excitations in single gold particles in an STM. <i>Physical Review B</i> , 2002 , 65,	3.3	37
493	Adsorption of potassium on Cr ₂ O ₃ (0001) at ionic and metallic coverages and uv-laser-induced desorption. <i>Physical Review B</i> , 1999 , 59, 13401-13412	3.3	37
492	Building blocks of zeolites on an aluminosilicate ultra-thin film. <i>Microporous and Mesoporous Materials</i> , 2013 , 165, 158-162	5.3	36
491	Interaction of Water with FeO(111)/Pt(111): Environmental Effects and Influence of Oxygen. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 19328-19335	3.8	36
490	Influence of CO adsorption on the magnetism of small Co particles deposited on Al ₂ O ₃ . <i>Chemical Physics Letters</i> , 1998 , 292, 524-530	2.5	36

489	Nucleation and Growth of Gold on MgO Thin Films: A Combined STM and Luminescence Study. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 10528-10533	3.8	36
488	Surface reactivity of Pd nanoparticles supported on polycrystalline substrates as compared to thin film model catalysts: infrared study of CH ₃ OH adsorption. <i>Journal of Catalysis</i> , 2004 , 223, 64-73	7.3	36
487	The Molecular Origins of Selectivity in Methanol Decomposition on Pd Nanoparticles. <i>Catalysis Letters</i> , 2002 , 84, 209-217	2.8	36
486	The temperature dependent growth mode of nickel on the basal plane of graphite. <i>Surface Science</i> , 1995 , 327, 321-329	1.8	36
485	Autoionization of CO after C 1s- π^* excitation: a comparison with photoemission and auger decay. <i>Chemical Physics Letters</i> , 1987 , 134, 70-75	2.5	36
484	Chemisorption of CO on Co(0001). II. Multielectron excitations. <i>Physical Review B</i> , 1983 , 28, 1727-1733	3.3	36
483	Surface Termination of FeO(111) Films Studied by CO Adsorption Revisited. <i>Journal of Physical Chemistry B</i> , 2018 , 122, 527-533	3.4	35
482	Understanding surface core-level shifts using the Auger parameter: A study of Pd atoms adsorbed on ultrathin SiO ₂ films. <i>Physical Review B</i> , 2014 , 89,	3.3	35
481	Tailoring the interaction strength between gold particles and silica thin films via work function control. <i>Physical Review Letters</i> , 2009 , 103, 056801	7.4	35
480	Relationships between complex core level spectra and materials properties. <i>International Journal of Quantum Chemistry</i> , 2010 , 110, 2752-2764	2.1	35
479	Metal Oxide Surfaces: Electronic Structure and Molecular Adsorption. <i>Physica Status Solidi (B): Basic Research</i> , 1995 , 192, 407-440	1.3	35
478	Stabilization of Ultrathin Zinc Oxide Films on Metals: Reconstruction versus Hydroxylation. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 7842-7847	3.8	34
477	Gold Adsorption on CeO ₂ Thin Films Grown on Ru(0001). <i>Journal of Physical Chemistry C</i> , 2013 , 117, 21879-21885	3.8	34
476	Well-Ordered Molybdenum Oxide Layers on Au(111): Preparation and Properties. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 8746-8757	3.8	34
475	Cathodoluminescence of near-surface centres in Cr-doped MgO(001) thin films probed by scanning tunnelling microscopy. <i>New Journal of Physics</i> , 2012 , 14, 033006	2.9	34
474	STM studies of rhodium deposits on an ordered alumina film-resolution and tip effects. <i>Surface Science</i> , 1998 , 402-404, 424-427	1.8	34
473	Defect-induced gap states in Al ₂ O ₃ thin films on NiAl(110). <i>Physical Review B</i> , 2004 , 69,	3.3	34
472	Growth of well-ordered silicon dioxide films on Mo(112). <i>Microelectronics Reliability</i> , 2000 , 40, 841-844	1.2	34

- 471 Adsorption of Gases on Solid Surfaces. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1995**, 99, 1261-1281 34
- 470 Molecules on oxide surfaces. *Catalysis Today*, **1996**, 32, 1-10 5.3 34
- 469 Lifetimes of electronically excited states of molecules on oxide versus metal surfaces. *Chemical Physics Letters*, **1993**, 203, 41-45 2.5 34
- 468 Toward Low-Temperature Dehydrogenation Catalysis: Isophorone Adsorbed on Pd(111). *Journal of Physical Chemistry Letters*, **2012**, 3, 582-6 6.4 33
- 467 Li/Mo codoping of CaO films: a means to tailor the equilibrium shape of Au deposits. *Journal of the American Chemical Society*, **2012**, 134, 2532-4 16.4 33
- 466 Morphology and Luminescence of ZnO Films Grown on a Au(111) Support. *Journal of Physical Chemistry C*, **2013**, 117, 10552-10557 3.8 33
- 465 The role of the initial population of molecular vibrations in surface photochemistry. *Chemical Physics*, **1998**, 228, 185-203 2.3 33
- 464 Oxidation of Alumina-Supported Co and CoPd Model Catalysts for the Fischer-Tropsch Reaction. *Journal of Physical Chemistry C*, **2007**, 111, 8566-8572 3.8 33
- 463 A new analysis of X-ray adsorption branching ratios: Use of Russell-Saunders coupling. *Chemical Physics Letters*, **2008**, 455, 331-334 2.5 33
- 462 Hydrierung an Metalloberflächen: Warum sind Nanoteilchen aktiver als Einkristalle?. *Angewandte Chemie*, **2003**, 115, 5398-5401 3.6 33
- 461 Using IR intensities as a probe for studying the surface chemical bond. *Surface Science*, **2003**, 546, L829-L885 33
- 460 Electronic states of the Cr₂O₃(0001) surface from ab initio embedded cluster calculations. *Journal of Physics Condensed Matter*, **1999**, 11, 7881-7891 1.8 33
- 459 Electron spectroscopy studies of small deposited metal particles. *Journal of Electron Spectroscopy and Related Phenomena*, **1995**, 76, 301-306 1.7 33
- 458 Electron stimulated hydroxylation of a metal supported silicate film. *Physical Chemistry Chemical Physics*, **2016**, 18, 3755-64 3.6 32
- 457 Luminescence Properties of Nitrogen-Doped ZnO. *Journal of Physical Chemistry C*, **2014**, 118, 13693-13698 33
- 456 Initial Formation of Positively Charged Gold on MgO(001) Thin Films: Identification by Experiment and Structural Assignment by Theory. *Journal of Physical Chemistry C*, **2011**, 115, 10114-10124 3.8 32
- 455 Morphology and CO adsorption on platinum supported on thin Fe₃O₄(111) films. *Journal of Physics Condensed Matter*, **2009**, 21, 134019 1.8 32
- 454 Oxygen adsorption on Mo(112) surface studied by ab initio genetic algorithm and experiment. *Journal of Chemical Physics*, **2007**, 126, 234710 3.9 32

453	Interpreting intensities in vibrational sum frequency generation (SFG) spectroscopy: CO adsorption on Pd surfaces. <i>Surface Science</i> , 2005 , 586, 146-156	1.8	32
452	Three-dimensional ab initio quantum dynamics of the photodesorption of CO from Cr(2)O(3)(0001): stereodynamic effects. <i>Physical Review Letters</i> , 2001 , 87, 077601	7.4	32
451	Photoionization of inner valence electrons of co2 in the gas phase: a synchrotron radiation study using photon energies between 40 AND 100 eV. <i>Chemical Physics Letters</i> , 1986 , 123, 463-470	2.5	32
450	Initial stages of CO adsorption on CaO: a combined experimental and computational study. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 4231-4242	3.6	31
449	Building block analysis of 2D amorphous networks reveals medium range correlation. <i>Journal of Non-Crystalline Solids</i> , 2016 , 435, 40-47	3.9	31
448	Phase transformations in thin iron oxide films: Spectromicroscopic study of velocity and shape of the reaction fronts. <i>Surface Science</i> , 2016 , 648, 177-187	1.8	31
447	Electronic properties and charge state of gold monomers and chains adsorbed on alumina thin films on NiAl(110). <i>Physical Review B</i> , 2010 , 81,	3.3	31
446	Nanofacet-resolved CO oxidation kinetics on alumina-supported Pd particles. <i>Chemical Physics Letters</i> , 2002 , 354, 403-408	2.5	31
445	CO Oxidation on a Pd/Fe3O4(111) Model Catalyst. <i>Zeitschrift Fur Physikalische Chemie</i> , 2004 , 218, 905-914	3.1	31
444	Low temperature infrared spectra of CO adsorbed on the surface of MgO(001) thin films. <i>Surface Science</i> , 2005 , 596, 222-228	1.8	31
443	Preparation and characterization of well-ordered, thin niobia films on a metal substrate. <i>Surface Science</i> , 2005 , 599, 14-26	1.8	31
442	Model in Heterogeneous Catalysis: Surface Science Quo Vadis?. <i>Physica Status Solidi A</i> , 2001 , 187, 257-274		31
441	Ultraviolet-laser induced desorption of NO from the Cr2O3(0001) surface: Involvement of a precursor state?. <i>Journal of Chemical Physics</i> , 1999 , 111, 1158-1168	3.9	31
440	Sodium Adsorption and Reaction on NiO(111)/Ni(111). <i>Langmuir</i> , 1994 , 10, 3081-3085	4	31
439	Reaction of CO2 on Pd(111) activated via promotor action of alkali coadsorption. <i>Vacuum</i> , 1990 , 41, 157-160	3.6	31
438	Improvement of motor performance of HIV-positive patients under AZT therapy. <i>Neurology</i> , 1992 , 42, 891-6	6.5	31
437	Competition between Polar and Nonpolar Growth of MgO Thin Films on Au(111). <i>Journal of Physical Chemistry C</i> , 2011 , 115, 23043-23049	3.8	30
436	Strain-induced formation of ultrathin mixed-oxide films. <i>Physical Review B</i> , 2011 , 83,	3.3	30

435	Palladium monomers, dimers, and trimers on the MgO(001) surface viewed individually. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 8703-6	16.4	30
434	Density-functional model cluster studies of EPR g tensors of Fs^+ centers on the surface of MgO. <i>Journal of Chemical Physics</i> , 2006 , 124, 044708	3.9	30
433	Two-photon photoemission from silver nanoparticles on thin alumina films: Role of plasmon excitation. <i>Surface Science</i> , 2005 , 593, 43-48	1.8	30
432	Observation of a localized surface phonon on an oxide surface. <i>Chemical Physics Letters</i> , 2000 , 320, 206-214	2.1	30
431	UV laser-induced desorption of CO from Cr ₂ O ₃ (111). A fully quantum state resolved mapping of the desorbing species. <i>Chemical Physics Letters</i> , 1994 , 222, 107-112	2.5	30
430	Thermal evolution of benzene adsorbate phases on a Os(0001) surface. <i>Surface Science</i> , 1989 , 223, 33-55	1.8	30
429	Bremsstrahlung isochromat spectroscopic study of the system CO/Ni(110): Strong intermolecular interaction. <i>Surface Science</i> , 1986 , 175, 651-658	1.8	30
428	Water Formation under Silica Thin Films: Real-Time Observation of a Chemical Reaction in a Physically Confined Space. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 8749-8753	16.4	29
427	Hydroxylation of Metal-Supported Sheet-Like Silica Films. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 8336-8344	3.8	29
426	CO+NO versus CO+O ₂ Reaction on Monolayer FeO(111) Films on Pt(111). <i>ChemCatChem</i> , 2011 , 3, 671-674	3.2	29
425	X-ray spectroscopic fingerprints of reactive oxygen sites at the MoO ₃ (0 1 0) surface. <i>Catalysis Today</i> , 2007 , 124, 21-27	5.3	29
424	Evidence for a size-selective adsorption mechanism on oxide surfaces: Pd and Au atoms on SiO ₂ /Mo(112). <i>ChemPhysChem</i> , 2008 , 9, 1367-70	3.2	29
423	Signal electronics for an atomic force microscope equipped with a double quartz tuning fork sensor. <i>Review of Scientific Instruments</i> , 2006 , 77, 043710	1.7	29
422	Surrogate Hamiltonian study of electronic relaxation in the femtosecond laser induced desorption of NO/NiO(100). <i>Journal of Chemical Physics</i> , 2003 , 119, 1750-1765	3.9	29
421	CO Interaction with Small Rhodium Clusters from Density Functional Theory: Spectroscopic Properties and Bonding Analysis. <i>Journal of Physical Chemistry A</i> , 2001 , 105, 10723-10730	2.8	29
420	Carbon Monoxide Oxidation on Metal-Supported Monolayer Oxide Films: Establishing Which Interface is Active. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 1261-1265	16.4	29
419	Surface structure of V ₂ O ₃ (0001) revisited. <i>Physical Review Letters</i> , 2015 , 114, 216101	7.4	28
418	CO Oxidation on Metal-Supported Ultrathin Oxide Films: What Makes Them Active?. <i>ChemCatChem</i> , 2013 , 5, 2162-2166	5.2	28

417	Local Characterization of Ultrathin ZnO Layers on Ag(111) by Scanning Tunneling Microscopy and Atomic Force Microscopy. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 27428-27435	3.8	28
416	Direct measurement of the attractive interaction forces on F0 color centers on MgO(001) by dynamic force microscopy. <i>ACS Nano</i> , 2010 , 4, 2510-4	16.7	28
415	Laser induced desorption of NO from NiO(100): Characterization of potential energy surfaces of excited states. <i>Journal of Molecular Catalysis A</i> , 1997 , 119, 155-163		28
414	The vibrational excitation of NO desorbing from NiO(100) after UV laser irradiation: is NO ⁺ possible intermediate species?. <i>Chemical Physics Letters</i> , 1998 , 294, 413-418	2.5	28
413	Einabhangiger Oxidationsmechanismus transferrierter Pd-Nanopartikel. <i>Angewandte Chemie</i> , 2006 , 118, 3775-3780	3.6	28
412	On the Role of Different Adsorption and Reaction Sites on Supported Nanoparticles during a Catalytic Reaction: NO Decomposition on a Pd/Alumina Model Catalyst <i>Journal of Physical Chemistry B</i> , 2004 , 108, 14244-14254	3.4	28
411	Gas Separation through Bilayer Silica, the Thinnest Possible Silica Membrane. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 43061-43071	9.5	27
410	Atomic structure of an ultrathin Fe-silicate film grown on a metal: a monolayer of clay?. <i>Journal of the American Chemical Society</i> , 2013 , 135, 19222-8	16.4	27
409	Crossover from two- to three-dimensional gold particle shapes on CaO films of different thicknesses. <i>Physical Review B</i> , 2012 , 85,	3.3	27
408	Size-dependent luminescence of small palladium particles. <i>Chemical Physics Letters</i> , 1998 , 291, 425-432	2.5	27
407	Adsorption of Au and Pd Atoms on Thin SiO ₂ Films: the Role of Atomic Structure. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 3405-3409	3.8	27
406	Local band gap modulations in non-stoichiometric V ₂ O ₃ films probed by scanning tunneling spectroscopy. <i>Physical Review B</i> , 2008 , 77,	3.3	27
405	Site occupation and activity of catalyst nanoparticles monitored by in situ vibrational spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2003 , 42, 3035-8	16.4	27
404	Comparative Study of Adsorbate Systems and Corresponding Compounds Using X-Ray and UV-Photoemission I. Hexagonal (0001) Co/CO, O ₂ versus Oxides and Carbonyls. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1979 , 83, 100-108		27
403	Surface core-level binding energy shifts for MgO(100). <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 21953-6	3.6	26
402	Change of the surface electronic structure of Au(111) by a monolayer MgO(001) film. <i>Physical Review B</i> , 2011 , 84,	3.3	26
401	Innovative measurement techniques in surface science. <i>ChemPhysChem</i> , 2011 , 12, 79-87	3.2	26
400	Gold atoms and clusters on MgO(100) films; an EPR and IRAS study. <i>Surface Science</i> , 2009 , 603, 1622-1628		26

399	TEM study of tantalum clusters on Al ₂ O ₃ /NiAl(110). <i>Surface Science</i> , 1998 , 412-413, 192-201	1.8	26
398	Properties of alkali metal atoms deposited on a MgO surface: a systematic experimental and theoretical study. <i>Chemistry - A European Journal</i> , 2008 , 14, 4404-14	4.8	26
397	A model high surface area alumina-supported palladium catalyst. <i>Physical Chemistry Chemical Physics</i> , 2005 , 7, 565-7	3.6	26
396	Models for oxidation catalyst: Characterization and reaction at the atomic level. <i>Catalysis Today</i> , 2006 , 117, 6-14	5.3	26
395	Interplay between theory and experiment in the quest for silica with reduced dimensionality grown on a Mo(112) surface. <i>Chemical Physics Letters</i> , 2006 , 424, 115-119	2.5	26
394	Evidence for Pd _x (CO) _y compound formation on an alumina substrate. <i>Chemical Physics Letters</i> , 1995 , 240, 429-434	2.5	26
393	Calculation of transition metal compounds using an extension of the CNDO-formalism. <i>Theoretica Chimica Acta</i> , 1980 , 57, 181-207		26
392	Formation of Water Chains on CaO(001): What Drives the 1D Growth?. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 1204-8	6.4	25
391	Charge Control in Model Catalysis: The Decisive Role of the Oxide-Nanoparticle Interface. <i>Chemistry - A European Journal</i> , 2018 , 24, 2317-2327	4.8	25
390	Metall-Substrat-Wechselwirkung: Kombination von hochauflösender Mikroskopie und Modellsystemen, um die atomare Struktur von Grenzflächen aufzuklären. <i>Angewandte Chemie</i> , 2014 , 126, 6108-6112	3.6	25
389	Model studies on heterogeneous catalysts at the atomic scale: From supported metal particles to two-dimensional zeolites. <i>Journal of Catalysis</i> , 2013 , 308, 154-167	7.3	25
388	Electron quantization in arbitrarily shaped gold islands on MgO thin films. <i>Physical Review B</i> , 2013 , 88,	3.3	25
387	Probing the 4f states of ceria by tunneling spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 12646-51	3.6	25
386	Preparation and characterization of iron-molybdate thin films. <i>Surface Science</i> , 2011 , 605, 1550-1555	1.8	25
385	Interaction of CO and NO with WC(0001). <i>Surface Science</i> , 1998 , 397, 137-144	1.8	25
384	Quantization of electronic states in individual oxide-supported silver particles. <i>Surface Science</i> , 2004 , 572, 347-354	1.8	25
383	Low temperature decomposition of NO on ordered alumina films. <i>Chemical Physics Letters</i> , 2003 , 381, 298-305	2.5	25
382	SFG spectroscopy from 10 ⁸ to 1000 mbar: less-ordered CO structures and coadsorption on Pd. <i>Surface Science</i> , 2003 , 532-535, 103-107	1.8	25

381	Rotational alignment in the photodesorption of CO from Cr ₂ O ₃ (0001): A systematic three-dimensional ab initio study. <i>Journal of Chemical Physics</i> , 2002 , 116, 762-773	3.9	25
380	Photon emission from individual supported gold clusters: thin film versus bulk oxide. <i>Surface Science</i> , 2001 , 478, L327-L332	1.8	25
379	N ₂ adsorption and dissociation on thin iron films on W(110). <i>Surface Science</i> , 1995 , 327, 216-224	1.8	25
378	Charge transfer effects and photoemission in transition metal oxides. <i>Chemical Physics Letters</i> , 1996 , 251, 90-94	2.5	25
377	Solid state effects on core-hole spectra. <i>Chemical Physics Letters</i> , 1981 , 77, 261-266	2.5	25
376	Molecular Adsorption Changes the Quantum Structure of Oxide-Supported Gold Nanoparticles: Chemisorption versus Physisorption. <i>Physical Review Letters</i> , 2015 , 115, 036804	7.4	24
375	Oxidation of the Ru(0001) surface covered by weakly bound, ultrathin silicate films. <i>Surface Science</i> , 2016 , 646, 19-25	1.8	24
374	Selective Partial Hydrogenation of Acrolein on Pd: A Mechanistic Study. <i>ACS Catalysis</i> , 2017 , 7, 5523-5533	3.1	24
373	Atomic structure of the ultrathin alumina on NiAl(110) and its antiphase domain boundaries as seen by frequency modulation dynamic force microscopy. <i>New Journal of Physics</i> , 2009 , 11, 093009	2.9	24
372	Atomically resolved force microscopy images of complex surface unit cells: Ultrathin alumina film on NiAl(110). <i>Physical Review B</i> , 2008 , 78,	3.3	24
371	Identification of the vanadyl terminated V ₂ O ₃ (0 0 0 1) surface by NEXAFS spectroscopy: A combined theoretical and experimental study. <i>Surface Science</i> , 2007 , 601, 5394-5402	1.8	24
370	Li atoms deposited on single crystalline MgO(0 0 1) surface. A combined experimental and theoretical study. <i>Chemical Physics Letters</i> , 2008 , 450, 308-311	2.5	24
369	Ice-Assisted Preparation of Silica-Supported Vanadium Oxide Particles. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 5337-5344	3.8	24
368	Adsorbate mobilities on catalyst nanoparticles studied via the angular distribution of desorbing products. <i>Surface Science</i> , 2004 , 561, L218-L224	1.8	24
367	Electron Spin-Resonance (ESR) Studies of Adsorbate Dynamics on Single Crystal Surfaces: Possibilities and Limitations. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1993 , 97, 340-352		24
366	Calculation of transition metal compounds using an extension of the CNDO formalism: VII. Simple interpretation of many-body effects in the core-photoionization of adsorbates by the study of CO/Ni and N ₂ /Ni model systems. <i>Surface Science</i> , 1981 , 102, 359-387	1.8	24
365	Growth of Fe ₃ O ₄ (001) thin films on Pt(100): Tuning surface termination with an Fe buffer layer. <i>Surface Science</i> , 2015 , 636, 42-46	1.8	23
364	Die atomare Struktur eines metallgestützten glasartigen dünnen Silikafilms. <i>Angewandte Chemie</i> , 2012 , 124, 416-420	3.6	23

- 363 Ultrathin Zn and ZnO films on Cu(111) as model catalysts. *Applied Catalysis A: General*, **2017**, 548, 16-23 5.1 23
- 362 Steering the Growth of Metal Ad-particles via Interface Interactions Between a MgO Thin Film and a Mo Support. *Advanced Functional Materials*, **2013**, 23, 75-80 15.6 23
- 361 Controlling the charge state of single Mo dopants in a CaO film. *Physical Review B*, **2013**, 88, 3-3 23
- 360 Adsorption of the Stable Radical Di-tert-butyl Nitroxide (DTBN) on an Epitaxially Grown Al₂O₃ Film. *Journal of Physical Chemistry B*, **1997**, 101, 552-560 3.4 23
- 359 Photoinduced processes on alkali covered surfaces: NO desorption from. *Surface Science*, **1997**, 390, 186-193 1.8 23
- 358 Photon mapping of MgO thin films with an STM. *Surface Science*, **2007**, 601, L55-L58 1.8 23
- 357 Katalytische Aktivität und Vergiftung spezifischer aktiver Zentren von Metall-Nanopartikeln auf Träger. *Angewandte Chemie*, **2002**, 114, 2643-2646 3.6 23
- 356 CO adsorption and thermal stability of Pd deposited on a thin FeO(111) film. *Surface Science*, **2005**, 586, 174-182 1.8 23
- 355 Adsorption and reaction of ethene on oxide-supported Pd, Rh, and Ir particles. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2001**, 19, 1497-1501 2.9 23
- 354 Photochemistry of Methane on Pd/Al₂O₃ Model Catalysts: Control of Photochemistry on Transition Metal Surfaces. *Angewandte Chemie - International Edition*, **1999**, 38, 2192-2194 16.4 23
- 353 Theoretical evidence for bent bonds in the CO₂ molecule. *Chemical Physics Letters*, **1986**, 126, 176-180 2.5 23
- 352 On the electronic structure of the coadsorbate system CO + O(2s)/Pd(111): A precursor for CO₂ formation. *Surface Science*, **1988**, 198, 331-359 1.8 23
- 351 The core-hole excitation spectrum of benzene: A symmetry-adapted CNDO/S equivalent-core study including spin-symmetry breaking configurations. *Journal of Chemical Physics*, **1982**, 77, 5552-5561 3.9 23
- 350 Preparation of Pd/MgO model catalysts by deposition of Pd from aqueous precursor solutions onto Ag(0 0 1)-supported MgO(0 0 1) thin films. *Applied Catalysis A: General*, **2014**, 474, 186-193 5.1 22
- 349 Probing the electronic properties and charge state of gold nanoparticles on ultrathin MgO versus thick doped CaO films. *Physical Review B*, **2015**, 92, 3-3 22
- 348 Resolving the Atomic Structure of Vanadia Monolayer Catalysts: Monomers, Trimers, and Oligomers on Ceria. *Angewandte Chemie*, **2009**, 121, 8150-8153 3.6 22
- 347 Growth of thin alumina films on a vicinal NiAl surface. *Surface Science*, **2007**, 601, 4603-4607 1.8 22
- 346 Direct observation of radicals in the activation of Ziegler-Natta catalysts. *Angewandte Chemie - International Edition*, **2002**, 41, 1517-20 16.4 22

345	Ultra-thin zeolite films prepared by spin-coating Silicalite-1 precursor solutions. <i>Chemical Physics Letters</i> , 2003 , 382, 404-409	2.5	22
344	Two-dimensional growth of Pd on a thin FeO(111) film: a physical manifestation of strong metal-support interaction. <i>Surface Science</i> , 2003 , 546, L813-L819	1.8	22
343	Investigation of the Molecular Motion of Self-Assembled Fatty Acid Films. <i>Journal of Physical Chemistry B</i> , 1998 , 102, 2668-2676	3.4	22
342	Photoionization study of the CN anion: A study of the NaCN(001) surface in comparison with CO and N ₂ . <i>Chemical Physics</i> , 1985 , 92, 457-470	2.3	22
341	CO Adsorption on Thin MgO Films and Single Au Adatoms: A Scanning Tunneling Microscopy Study. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 8997-9001	3.8	21
340	Realization of an atomic sieve: Silica on Mo(1 1 2). <i>Surface Science</i> , 2009 , 603, 1145-1149	1.8	21
339	Photon mapping of individual Ag particles on MgO/Mo(001). <i>Physical Review B</i> , 2011 , 83,	3.3	21
338	Growth of stoichiometric subnanometer silica films. <i>Applied Physics Letters</i> , 2008 , 92, 011911	3.4	21
337	Formation of one-dimensional molybdenum oxide on Mo(1 1 2). <i>Surface Science</i> , 2008 , 602, 3338-3342	1.8	21
336	EPR properties of Au atoms adsorbed on various sites of the MgO(1 0 0) surface from relativistic DFT calculations. <i>Surface Science</i> , 2006 , 600, 2434-2442	1.8	21
335	Extending UHV studies to the mbar range: vibrational SFG spectroscopy of high-pressure CO adsorption on Pt(1 1 1) and Pd(1 1 1). <i>Vacuum</i> , 2003 , 71, 83-87	3.7	21
334	Surface photochemistry on confined systems: UV-laser-induced photodesorption of NO from Pd-nanostructures on Al ₂ O ₃ . <i>Physical Chemistry Chemical Physics</i> , 2002 , 4, 2629-2637	3.6	21
333	CO ₂ adsorption on Na precovered Cr ₂ O ₃ (0). <i>Surface Science</i> , 2002 , 505, 215-224	1.8	21
332	Lateral Interaction in Ordered Hydrocarbon Overlayers: C-H Band Dispersion of Adsorbed Benzene. <i>Europhysics Letters</i> , 1990 , 12, 173-177	1.6	21
331	UV-laserphotochemistry of molecules on solid surfaces: NO/Ni(100)-O. <i>Physica Scripta</i> , 1990 , 41, 134-139.	2.6	21
330	Autoionization versus photoionization of molecular adsorbates: CO ₂ physisorbed on Ni(110). <i>Physical Review B</i> , 1990 , 41, 10510-10522	3.3	21
329	Electron energy loss study of the electronically excited states of adsorbed CO ₂ : Case study CO ₂ /Fe. <i>Surface Science</i> , 1987 , 184, 335-344	1.8	21
328	Does the Surface Structure of Oxide Affect the Strong Metal-Support Interaction with Platinum? Platinum on Fe ₃ O ₄ (0 0 1) versus Fe ₃ O ₄ (1 1 1). <i>ChemCatChem</i> , 2015 , 7, 3725-3730	5.2	20

- 327 Low Temperature CO Oxidation on Ruthenium Oxide Thin Films at Near-Atmospheric Pressures. *Catalysis Letters*, **2012**, 142, 657-663 2.8 20
- 326 Structural and electronic characterization of the MgO/Mo(0 0 1) interface using STM. *Surface Science*, **2010**, 604, 435-441 1.8 20
- 325 Metal Deposits on Thin Well Ordered Oxide Films: Morphology, Adsorption and Reactivity **1997**, 61-104 20
- 324 Photo-induced desorption of NO from NiO(100): calculation of the four-dimensional potential energy surfaces and systematic wave packet studies. *Physical Chemistry Chemical Physics*, **2006**, 8, 1584-92^{3,6} 20
- 323 Deactivation of Pd particles supported on Nb₂O₅/Cu₃Au(1 0 0): SFG and TPD studies from UHV to 100 mbar. *Surface Science*, **2006**, 600, 963-970 1.8 20
- 322 Complete analysis of the angular momentum distribution of molecules desorbing from a surface. *Journal of Chemical Physics*, **2003**, 119, 10367-10375 3.9 20
- 321 Activation of the C-O bond on the surface of palladium: An In situ study by X-ray photoelectron spectroscopy and sum frequency generation. *Kinetics and Catalysis*, **2005**, 46, 269-281 1.5 20
- 320 NO₂ adsorption on Ni(100): A comparison of NO₂ with CO₂ adsorption. *Surface Science*, **1990**, 234, 237-250 20
- 319 Calculation of transition metal compounds using an extension of the CNDO formalism. V. many body effects in the inner valence shell photoionization spectra of free and coordinated carbon monoxide. *Chemical Physics*, **1981**, 55, 339-354 2.3 20
- 318 Ultrathin silica films on Pd(111): Structure and adsorption properties. *Surface Science*, **2018**, 678, 118-123.8 19
- 317 Selective Hydrogenation of Acrolein Over Pd Model Catalysts: Temperature and Particle-Size Effects. *Chemistry - A European Journal*, **2016**, 22, 15856-15863 4.8 19
- 316 Water adsorption on the FeO(111) surface: dissociation and network formation. *Physical Chemistry Chemical Physics*, **2018**, 20, 15764-15774 3.6 19
- 315 Oxidation of Reduced Ceria by Incorporation of Hydrogen. *Angewandte Chemie*, **2019**, 131, 14828-14835.6 19
- 314 Assessing the amorphousness and periodicity of common domain boundaries in silica bilayers on Ru(0 0 0 1). *Journal of Physics Condensed Matter*, **2017**, 29, 035002 1.8 19
- 313 Modifying the adsorption characteristic of inert silica films by inserting anchoring sites. *Physical Review Letters*, **2009**, 102, 016102 7.4 19
- 312 Lithium incorporation into a silica thin film: Scanning tunneling microscopy and density functional theory. *Physical Review B*, **2009**, 80, 3.3 19
- 311 Strong metal support interaction on Co/niobia model catalysts. *Catalysis Letters*, **2006**, 111, 35-41 2.8 19
- 310 Lateral velocity distributions in laser-induced desorption of CO from Cr₂O₃(0001): experiment and theory. *Applied Physics A: Materials Science and Processing*, **2004**, 78, 223-230 2.6 19

309	Model Catalyst Studies on Vanadia Particles Deposited onto a Thin-Film Alumina Support. 2. Interaction with Carbon Monoxide. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 9003-9010	3.4	19
308	Sauerstoffspeicherung an der Metall-Oxid-Grenzfläche von Katalysatornanopartikeln. <i>Angewandte Chemie</i> , 2005 , 117, 7773-7777	3.6	19
307	Excitation energy dependence in the photoemission satellite structures in solid CO and N ₂ . <i>Journal of Chemical Physics</i> , 1983 , 78, 700-707	3.9	19
306	Controlling Silica in Its Crystalline and Amorphous States: A Problem in Surface Science. <i>Accounts of Chemical Research</i> , 2017 , 50, 446-449	24.3	18
305	Direct observation of epitaxial organic film growth: temperature-dependent growth mechanisms and metastability. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 29150-60	3.6	18
304	Surface Structure of V ₂ O ₃ (0001): A Combined I/V-LEED and STM Study. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 22961-22969	3.8	18
303	Cooperative Chemisorption-Induced Physisorption of CO ₂ Molecules by Metal-Organic Chains. <i>ACS Nano</i> , 2015 , 9, 12124-36	16.7	18
302	Surface defects and their impact on the electronic structure of Mo-doped CaO films: an STM and DFT study. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 12764-72	3.6	18
301	Methanol Adsorption on V ₂ O ₃ (0001). <i>Topics in Catalysis</i> , 2011 , 54, 669-684	2.3	18
300	Einfluss von Kohlenstoffablagerungen auf die Wasserstoffverteilung in Pd-Nanopartikeln und deren Reaktivität in der Olefinhydrierung. <i>Angewandte Chemie</i> , 2008 , 120, 9430-9434	3.6	18
299	Wechselwirkung kleiner Au-Teilchen mit Farbzentren auf einkristallinen MgO(001)-Filmen. <i>Angewandte Chemie</i> , 2006 , 118, 2692-2695	3.6	18
298	CO adsorption on the surface of MgO(0 0 1) thin films. <i>Applied Catalysis A: General</i> , 2006 , 307, 58-61	5.1	18
297	Model Studies in Heterogeneous Catalysis. From Structure to Kinetics. <i>Monatshefte für Chemie</i> , 2005 , 136, 59-75	1.4	18
296	Local reaction rates and surface diffusion on nanolithographically prepared model catalysts: experiments and simulations. <i>Journal of Chemical Physics</i> , 2005 , 122, 84713	3.9	18
295	Interaction and diffusion of potassium on Cr ₂ O ₃ (0001)/Cr(110). <i>Physical Review B</i> , 2000 , 62, 7527-7534	3.3	18
294	Electronic and geometric structure of adsorbates on oxide surfaces. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1994 , 68, 347-355	1.7	18
293	Electron spectroscopy of adsorbates via autoionization of core-to-bound excited states: experiment and theory. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1990 , 51, 149-165	1.7	18
292	Calculations of transition metal compounds using an extension of the CNDO formalism. <i>Journal of Organometallic Chemistry</i> , 1980 , 186, 63-75	2.3	18

291	X-ray photoelectron spectroscopy of gaseous and solid I ₂ : Ion-state-enhanced intermolecular interactions. <i>Physical Review B</i> , 1981 , 24, 2403-2411	3.3	18
290	On the importance of photoconduction in ESCA experiments. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1977 , 12, 435-441	1.7	18
289	Nanoscale Patterns on Polar Oxide Surfaces. <i>Chemistry of Materials</i> , 2016 , 28, 7433-7443	9.6	18
288	Preparation of silica films on Ru(0001): A LEEM/PEEM study. <i>Surface Science</i> , 2016 , 643, 45-51	1.8	17
287	Oxygen activation on oxide surfaces: A perspective at the atomic level. <i>Catalysis Today</i> , 2014 , 238, 2-9	5.3	17
286	Metal-supported aluminosilicate ultrathin films as a versatile tool for studying the surface chemistry of zeolites. <i>ChemPhysChem</i> , 2013 , 14, 71-7	3.2	17
285	Topological Investigation of Two-Dimensional Amorphous Materials. <i>Zeitschrift Fur Physikalische Chemie</i> , 2014 , 228,	3.1	17
284	Growth and morphology of metal particles on MgO/Mo(001): A comparative STM and diffraction study. <i>Physical Review B</i> , 2011 , 83,	3.3	17
283	Combined UHV and ambient pressure studies of 1,3-butadiene adsorption and reaction on Pd(1 1 1) by GC, IRAS and XPS. <i>Catalysis Communications</i> , 2007 , 8, 292-298	3.2	17
282	Low temperature CO induced growth of Pd supported on a monolayer silica film. <i>Surface Science</i> , 2006 , 600, L153-L157	1.8	17
281	Formation of one-dimensional crystalline silica on a metal substrate. <i>Surface Science</i> , 2006 , 600, L164-L168	1.8	17
280	A direct observation of the two-dimensional π bands for adsorbed CO. <i>Applied Physics A: Materials Science and Processing</i> , 1987 , 44, 83-86	2.6	17
279	CO Oxidation Over Monolayer Manganese Oxide Films on Pt(111). <i>Catalysis Letters</i> , 2013 , 143, 1108-1115	5.8	16
278	Stabilizing gold adatoms by thiophenyl derivatives: a possible route toward metal redispersion. <i>Journal of the American Chemical Society</i> , 2012 , 134, 11161-7	16.4	16
277	Atomic structure of surface defects in alumina studied by dynamic force microscopy: strain-relief-, translation- and reflection-related boundaries, including their junctions. <i>New Journal of Physics</i> , 2011 , 13, 123028	2.9	16
276	IR spectroscopy of a Pd-carbonyl surface compound. <i>Chemical Physics Letters</i> , 1997 , 277, 513-520	2.5	16
275	Structural studies of WC(0001) and the adsorption of benzene. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1998 , 96, 53-60	1.7	16
274	Growth and Characterization of Ultrathin V ₂ O ₅ (γ β) Films on Au(111). <i>Journal of Physical Chemistry C</i> , 2008 , 112, 12363-12373	3.8	16

273	Two-dimensional surrogate Hamiltonian investigation of laser-induced desorption of NO/NiO(100). <i>Journal of Chemical Physics</i> , 2006 , 124, 024702	3.9	16
272	Local zero-bias anomaly in tunneling spectra of a transition-metal oxide thin film. <i>Physical Review B</i> , 2007 , 75,	3.3	16
271	Substrate-mediated interaction and electron-induced diffusion of single lithium atoms on Ag(001). <i>Physical Review B</i> , 2007 , 75,	3.3	16
270	Electron, photon and thermally induced chemistry in alkali π O coadsorbates on oxide surfaces. <i>Surface Science</i> , 2002 , 513, 221-232	1.8	16
269	Photon emission spectroscopy of NiAl(110) in the scanning tunneling microscope. <i>Physical Review B</i> , 2000 , 61, 12682-12685	3.3	16
268	Electronic structure of a Pt π Fe surface alloy. <i>Surface Science</i> , 2000 , 464, 48-56	1.8	16
267	Transmission electron microscopy study of platinum clusters on Al ₂ O ₃ /NiAl(110) under the influence of electron irradiation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1999 , 17, 577-583	2.9	16
266	Adsorption and reaction of magnesium on. <i>Surface Science</i> , 1996 , 365, 394-402	1.8	16
265	Adsorption, thermal and photochemical reactions of NO on clean and oxygen precovered Ni(100) surfaces. <i>Vacuum</i> , 1990 , 41, 34-36	3.7	16
264	Adsorption of isophorone and trimethyl-cyclohexanone on Pd(111): A combination of infrared reflection absorption spectroscopy and density functional theory studies. <i>Surface Science</i> , 2016 , 650, 149-160	1.8	16
263	Interaction of Hydrogen with Ceria: Hydroxylation, Reduction, and Hydride Formation on the Surface and in the Bulk. <i>Chemistry - A European Journal</i> , 2021 , 27, 5268-5276	4.8	16
262	CO ₂ Adsorption on Magnetite Fe ₃ O ₄ (111). <i>Journal of Physical Chemistry C</i> , 2018 , 122, 27433-27441	3.8	16
261	The Frontiers of Catalysis Science and Future Challenges. <i>Catalysis Letters</i> , 2015 , 145, 1-2	2.8	15
260	Supports and modified nano-particles for designing model catalysts. <i>Faraday Discussions</i> , 2016 , 188, 309-321	3.4	15
259	Hydrogen Evolution from MetalSurface Hydroxyl Interaction. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 17717-17723	3.8	15
258	Insights into Silica Bilayer Hydroxylation and Dissolution. <i>Topics in Catalysis</i> , 2017 , 60, 471-480	2.3	15
257	Defect complexes in Li-doped MgO. <i>Physical Review B</i> , 2015 , 91,	3.3	15
256	Surface structure of π Fe ₂ O ₃ (111). <i>Surface Science</i> , 2012 , 606, 1594-1599	1.8	15

255	Probing the properties of metal-oxide interfaces: silica films on Mo and Ru supports. <i>Journal of Physics Condensed Matter</i> , 2012 , 24, 354010	1.8	15
254	Metal Aggregates on Oxide Surfaces: Structure and Adsorption. <i>Crystal Research and Technology</i> , 1998 , 33, 977-1008	1.3	15
253	Light emission spectroscopy of self-assembled arrays of silver nano-crystals with the STM. <i>Chemical Physics Letters</i> , 2005 , 413, 10-15	2.5	15
252	Angular distributions of NO in laser-induced desorption from Pt(111). <i>Surface Science</i> , 1999 , 427-428, 27-33	1.8	15
251	Computer Simulations of State-Specific Laser-Induced Desorption of NO from NiO. <i>The Journal of Physical Chemistry</i> , 1994 , 98, 11962-11968		15
250	The T ₁ state of p-nitroaniline and related molecules: A CNDO/S study. <i>Theoretica Chimica Acta</i> , 1983 , 63, 177-194		15
249	Charge distribution in some ternary vintl phases as studied by v-ray photoelectron spectroscopy. <i>Journal of the Less Common Metals</i> , 1986 , 115, 127-143		15
248	Intense core-hole satellite structure in aromatic donor/acceptor molecules. <i>Chemical Physics Letters</i> , 1981 , 82, 305-310	2.5	15
247	Support Effects on CO Oxidation on Metal-supported Ultrathin FeO(1 1 1) Films. <i>ChemCatChem</i> , 2017 , 9, 705-712	5.2	14
246	Atomic structure of a metal-supported two-dimensional germania film. <i>Physical Review B</i> , 2018 , 97,	3.3	14
245	Resolving amorphous solid-liquid interfaces by atomic force microscopy. <i>Applied Physics Letters</i> , 2016 , 108, 201602	3.4	14
244	MgO on Mo(001): Local Work Function Measurements above Pristine Terrace and Line Defect Sites. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 12283-12290	3.8	14
243	Morphological and chemical influences on alumina-supported palladium catalysts active for the gas phase hydrogenation of crotonaldehyde. <i>Journal of Chemical Physics</i> , 2011 , 134, 214704	3.9	14
242	Structure and electronic properties of step edges in the aluminum oxide film on NiAl(110). <i>Physical Review B</i> , 2010 , 82,	3.3	14
241	A Scanning Tunneling Microscopy Observation of ($\sqrt{3}\times\sqrt{3}$) R30° Reconstructed Ni ₂ P(0001). <i>Japanese Journal of Applied Physics</i> , 2008 , 47, 6088-6091	1.4	14
240	Sum Frequency Generation Study of CO Adsorption on Palladium Model Catalysts. <i>Physica Status Solidi A</i> , 2001 , 188, 1495-1503		14
239	Field ion microscopy of platinum adatoms deposited on a thin Al ₂ O ₃ film on NiAl(110). <i>Ultramicroscopy</i> , 1999 , 79, 231-238	3.1	14
238	Changes in the magnetism of small supported cobalt particles during the oxidation process observed by ferromagnetic resonance. <i>Surface Science</i> , 1999 , 429, 246-254	1.8	14

237	Electron Spin Resonance Spectroscopic Investigation of the Rotational Motion of Self-Assembled Fatty Acid Films on Al ₂ O ₃ /NiAl(110). <i>Langmuir</i> , 1996 , 12, 5512-5514	4	14
236	Charging and rotational dependence of line position. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1977 , 12, 425-434	1.7	14
235	Revisiting surface core-level shifts for ionic compounds. <i>Physical Review B</i> , 2019 , 100,	3.3	13
234	Ultrathin Ti-Silicate Film on a Ru(0001) Surface. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 15443-15448	3.8	13
233	Ultrathin silicatene/silicon-carbide hybrid film on a metal substrate. <i>Surface Science</i> , 2015 , 632, 9-13	1.8	13
232	Mo+TiO ₂ (110) Mixed Oxide Layer: Structure and Reactivity. <i>Topics in Catalysis</i> , 2013 , 56, 1389-1403	2.3	13
231	Modellierung von Zeolithen durch zweidimensionale Aluminosilicatfilme auf Metallunterlagen. <i>Angewandte Chemie</i> , 2012 , 124, 6107-6111	3.6	13
230	Molecular adsorption on V ₂ O ₃ (0001)/Au(111) surfaces. <i>Topics in Catalysis</i> , 2007 , 46, 223-230	2.3	13
229	Frequency modulated atomic force microscopy on MgO(001) thin films: interpretation of atomic image resolution and distance dependence of tip-sample interaction. <i>Nanotechnology</i> , 2006 , 17, S101-6	3.4	13
228	Oberflächengebundene Intermediate verursachen Teilchengrößeneinflüsse bei der Hydrierung von Alkenen auf Palladium. <i>Angewandte Chemie</i> , 2005 , 117, 635-637	3.6	13
227	Observation of a low-energy adsorbate core-level satellite for CO bonded to palladium: Coordination-dependent effects. <i>Physical Review B</i> , 1998 , 57, 13199-13208	3.3	13
226	Interpretation of electronic excitations in coordinated CO systems as observed by electron-energy-loss spectroscopy. <i>Physical Review B</i> , 1986 , 33, 5228-5240	3.3	13
225	Photoionization of inner valence electrons in gaseous NO: a synchrotron radiation study. <i>Chemical Physics Letters</i> , 1987 , 137, 425-430	2.5	13
224	Analysis of bonding properties in molecular ground and excited states by a Cohen-type bond order. <i>International Journal of Quantum Chemistry</i> , 1983 , 24, 747-765	2.1	13
223	X-ray photoelectron spectroscopy study of silica-alumina catalysts used for a new pyridine synthesis. <i>Journal of Catalysis</i> , 1985 , 94, 69-78	7.3	13
222	Calculation of transition metal compounds using an extension of the CNDO formalism. <i>Molecular Physics</i> , 1982 , 45, 427-439	1.7	13
221	X-ray photoemission study of satellite structure accompanying core ionization from coordinated nitrogen. <i>Chemical Physics</i> , 1983 , 81, 99-112	2.3	13
220	Aktivierung und Elektronentransfer-induzierte Reaktion von Kohlendioxid an einer Oxid-Metall-Grenzfläche. <i>Angewandte Chemie</i> , 2015 , 127, 12661-12665	3.6	12

219	Evolution of the electronic structure of CaO thin films following Mo interdiffusion at high temperature. <i>Physical Review B</i> , 2015 , 91,	3.3	12
218	Growth of Two-Dimensional Lithium Islands on CaO(001) Thin Films. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 17980-17984	3.8	12
217	Trends in der Bindungsstärke von Oberflächenpezies auf Nanopartikeln: Wie verändert sich die Adsorptionsenergie mit der Partikelgröße?. <i>Angewandte Chemie</i> , 2013 , 125, 5282-5287	3.6	12
216	Local work function differences at line defects in aluminium oxide on NiAl(110). <i>ChemPhysChem</i> , 2010 , 11, 2085-7	3.2	12
215	Ungewöhnliches Schwingungsspektrum von CO auf Au ¹ /MgO(001)/Mo(001): ein Effekt der Sonde. <i>Angewandte Chemie</i> , 2006 , 118, 2695-2698	3.6	12
214	Transient and steady state CO oxidation kinetics on nanolithographically prepared supported Pd model catalysts: experiments and simulations. <i>Journal of Chemical Physics</i> , 2005 , 123, 054701	3.9	12
213	Comparison of Oxidized Polycrystalline Copper Foil with Small Deposited Copper Clusters in Their Behavior in Ammonia Oxidation: An Investigation by Means of In Situ NEXAFS Spectroscopy in the Soft X-Ray Range. <i>Catalysis Letters</i> , 2003 , 86, 245-260	2.8	12
212	Mechanism of the UV-laser-induced desorption of CO from Cr ₂ O ₃ (0001). <i>Surface Science</i> , 1996 , 363, 252-261	1.8	12
211	Configuration interaction study of shake-up structure accompanying core-ionization of substituted aromatic molecules in the vapor and condensed phases: Nitrosobenzene, diazobenzene dioxide and the no dimer. <i>Chemical Physics</i> , 1985 , 94, 215-233	2.3	12
210	Core-hole spectra of D ⁺ -Ar ⁺ A ⁺ molecules in the solid state (D = dialkylamino; A = pyridinium, pyrylium, thiapyrylium). <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1982 , 28, 149-170	1.7	12
209	Band-Structure Determination of Adsorbates. <i>Springer Series in Surface Sciences</i> , 1995 , 9-63	0.4	12
208	Chapter model systems in heterogeneous catalysis at the atomic level: a personal view. <i>Science China Chemistry</i> , 2020 , 63, 426-447	7.9	11
207	A Two-Dimensional 'Zigzag' Silica Polymorph on a Metal Support. <i>Journal of the American Chemical Society</i> , 2018 , 140, 6164-6168	16.4	11
206	Correlation Between Substrate Morphology and the Initial Stages of Epitaxial Organic Growth: PTCDA/Ag(111). <i>Journal of Physical Chemistry C</i> , 2016 , 120, 19271-19279	3.8	11
205	Preparation of an ordered ultra-thin aluminosilicate framework composed of hexagonal prisms forming a percolated network. <i>Microporous and Mesoporous Materials</i> , 2014 , 189, 91-96	5.3	11
204	Oxygen Scrambling of CO ₂ Adsorbed on CaO(001). <i>Journal of Physical Chemistry C</i> , 2017 , 121, 18625-18634	3.8	11
203	Ultra-thin silicate films on metals. <i>Journal of Physics Condensed Matter</i> , 2015 , 27, 443001	1.8	11
202	Photoinduced abstraction reactions within NO dimers on Ag(111). <i>Journal of the American Chemical Society</i> , 2009 , 131, 1660-1	16.4	11

201	State-resolved investigation of the photodesorption dynamics of NO from (NO) ₂ on Ag nanoparticles of various sizes in comparison with Ag(111). <i>Journal of Chemical Physics</i> , 2011 , 134, 164702 ^{3.9}		11
200	Adsorption and Reaction of Ethene on Cr ₂ O ₃ (0001)/Cr(110). <i>Zeitschrift Fur Physikalische Chemie</i> , 1997 , 202, 31-43	3.1	11
199	Hyperthermal chaotic photodesorption of xenon from alumina-supported silver nanoparticles: plasmonic coupling and plasmon-induced desorption. <i>Physical Review Letters</i> , 2007 , 99, 225501	7.4	11
198	Structural changes in nanoparticle catalysts as monitored by their magnetic properties. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 517-20	16.4	11
197	Rovibrational preexcitation in the photodesorption of CO from Cr ₂ O ₃ . <i>Chemical Physics</i> , 2002 , 282, 361-370	3.9	11
196	High-dimensional quantum dynamics of molecules on surfaces: a massively parallel implementation. <i>Computer Physics Communications</i> , 2002 , 143, 162-173	4.2	11
195	Interaction of NO with alumina supported palladium model catalysts. <i>Physical Chemistry Chemical Physics</i> , 2003 , 5, 5139-5148	3.6	11
194	Three-dimensional ab initio simulation of laser-induced desorption of NO from NiO(100). <i>Chemical Physics Letters</i> , 2005 , 415, 150-154	2.5	11
193	Investigation of the rotational motion of self-assembled fatty acid films: An electron paramagnetic resonance line shape analysis. <i>Journal of Chemical Physics</i> , 1998 , 108, 8615-8625	3.9	11
192	FMR studies on ultrathin metallic films grown on Al ₂ O ₃ surfaces. <i>Journal of Magnetism and Magnetic Materials</i> , 1999 , 198-199, 354-356	2.8	11
191	Angular-resolved autoionization study of CO on Ni(110): Experiment and theory. <i>Physical Review B</i> , 1994 , 49, 10557-10571	3.3	11
190	Identification of precursor states in the dissociation of adsorbed benzene on Os(0001): A HREELS study. <i>Chemical Physics Letters</i> , 1990 , 165, 137-141	2.5	11
189	Planar model system of the Phillips (Cr/SiO ₂) catalyst based on a well-defined thin silicate film. <i>Journal of Catalysis</i> , 2018 , 357, 12-19	7.3	11
188	Bending Rigidity of 2D Silica. <i>Physical Review Letters</i> , 2018 , 120, 226101	7.4	11
187	Molecular beam/infrared reflection-absorption spectroscopy apparatus for probing heterogeneously catalyzed reactions on functionalized and nanostructured model surfaces. <i>Review of Scientific Instruments</i> , 2019 , 90, 053903	1.7	10
186	Phonon-mediated electron transport through CaO thin films. <i>Physical Review Letters</i> , 2015 , 114, 016804 ^{7.4}		10
185	Tuning Spatial Distribution of Surface Hydroxyls on a Metal-Supported Single-Layer Silica. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 1701-4	6.4	10
184	Spontaneous Oxidation of Mg Atoms at Defect Sites in an MgO Surface. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 3684-3687	3.8	10

183	Temperature dependent XPS study of CO dissociation on small Rh particles. <i>Vacuum</i> , 1998 , 49, 167-170	3.7	10
182	Preparation of Vanadium and Vanadium Oxide Clusters by Means of Inert Gas Aggregation. <i>Catalysis Letters</i> , 2002 , 81, 219-221	2.8	10
181	Adsorption and reaction on pristine and oxidized CoPd bimetallic particles supported on Al ₂ O ₃ thin films. <i>Surface Science</i> , 2003 , 545, 143-153	1.8	10
180	Palladium Deposits on a Single Crystalline Cr ₂ O ₃ (0001) Surface. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 6723-6731	3.4	10
179	Molecular Adsorption on Thin Ordered Oxide Films and Single Crystal Oxide Surfaces. <i>Springer Series in Surface Sciences</i> , 1993 , 136-146	0.4	10
178	Surface core level BE shifts for CaO(100): insights into physical origins. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 25431-25438	3.6	10
177	Formation and Evolution of Ultrathin Silica Polymorphs on Ru(0001) Studied with Combined in Situ, Real-Time Methods. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 8228-8243	3.8	10
176	A Silica Bilayer Supported on Ru(0001): Following the Crystalline-to Vitreous Transformation in Real Time with Spectro-microscopy. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 10587-10593	16.4	9
175	Elucidating Surface Structure with Action Spectroscopy. <i>Journal of the American Chemical Society</i> , 2020 , 142, 2665-2671	16.4	9
174	Preparation and structure of Fe-containing aluminosilicate thin films. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 25027-25035	3.6	9
173	Model Studies on Heterogeneous Catalysts at the Atomic Scale. <i>Topics in Catalysis</i> , 2014 , 57, 822-832	2.3	9
172	Carbon Dioxide Adsorption on V ₂ O ₃ (0001). <i>Topics in Catalysis</i> , 2017 , 60, 413-419	2.3	9
171	Models for heterogeneous catalysts: studies at the atomic level. <i>Rendiconti Lincei</i> , 2017 , 28, 5-18	1.7	9
170	Comparative study of thermal and photo-induced reactions of NO on particulate and flat silver surfaces. <i>Surface Science</i> , 2012 , 606, 1142-1151	1.8	9
169	Aktivierung von molekularem Sauerstoff auf MgO: Bildung von O ₂ auf dünnen, trügerfixierten MgO(001)-Filmen. <i>Angewandte Chemie</i> , 2011 , 123, 2684-2687	3.6	9
168	Stabilizing monomeric iron species in a porous silica/Mo(112) film. <i>ACS Nano</i> , 2010 , 4, 863-8	16.7	9
167	Electron spectroscopic study of the interaction of WC(0001) with different adsorbates (C ₆ H ₆ , CO and NO). <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1998 , 88-91, 809-815	1.7	9
166	Formation and catalytic activity of partially oxidized Pd nanoparticles. <i>Topics in Catalysis</i> , 2007 , 42-43, 387-391	2.3	9

165	Reorganization of small Co particles on Al ₂ O ₃ surfaces monitored by ferromagnetic resonance. <i>Journal of Chemical Physics</i> , 2005 , 122, 164704	3.9	9
164	Reaction kinetics on supported model catalysts: Molecular beam/in situ time-resolved infrared reflection absorption spectroscopy study of the CO oxidation on alumina supported Pd particles. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2001 , 19, 1516-1523	2.9	9
163	UHV-ESR investigation of NO ₂ /Au(111). <i>Journal of Physics Condensed Matter</i> , 1993 , 5, 5471-5480	1.8	9
162	CO ₂ Activation on Transition Metal Surfaces 1994 , 31-43		9
161	Autoionization Versus Photoionization and Auger Decay of Physisorbed Molecular Adsorbates: Condensed Benzene on Cu (110). <i>Physica Scripta</i> , 1992 , T41, 197-207	2.6	9
160	Auger electron spectroscopic study of the CN anion: A study of the NaCN(001) surface in comparison with CO and N ₂ . <i>Chemical Physics Letters</i> , 1985 , 119, 344-350	2.5	9
159	Carbon Monoxide Oxidation on Metal-Supported Monolayer Oxide Films: Establishing Which Interface is Active. <i>Angewandte Chemie</i> , 2018 , 130, 1275-1279	3.6	9
158	From Crystalline to Amorphous Germanium Bilayer Films at the Atomic Scale: Preparation and Characterization. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 10903-10908	16.4	8
157	Water Ordering on the Magnetite FeO Surfaces. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 2487-2492	16.4	8
156	Weak thermal reduction of biphasic Fe ₂ O ₃ (0001) films grown on Pt(111): Sub-surface Fe ²⁺ formation. <i>Surface Science</i> , 2015 , 641, 30-36	1.8	8
155	The role of exposed silver in CO oxidation over MgO(0 0 1)/Ag(0 0 1) thin films. <i>Catalysis Today</i> , 2015 , 240, 206-213	5.3	8
154	Water Adsorption to Crystalline Cu ₂ O Thin Films: Structural and Vibrational Properties. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 2195-2199	3.8	8
153	Effect of vanadium admixing on the surface structure of TiO ₂ (110) under non-oxidizing conditions. <i>Surface Science</i> , 2016 , 653, 181-186	1.8	8
152	Reducing the V ₂ O ₃ (0001) surface through electron bombardment--a quantitative structure determination with I/V-LEED. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 3124-30	3.6	8
151	Adsorption of thioether molecules on an alumina thin film. <i>Surface Science</i> , 2014 , 628, 111-115	1.8	8
150	Charge competition with oxygen molecules determines the growth of gold particles on doped CaO films. <i>Faraday Discussions</i> , 2013 , 162, 153-63	3.6	8
149	Atomic Scale Characterization of Defects on Oxide Surfaces. <i>Springer Series in Surface Sciences</i> , 2015 , 29-80	0.4	8
148	Properties of Oxide Surfaces 2013 , 229-278		8

147	UV photo-dissociation and photodesorption of N ₂ O on Ag(111). <i>Journal of Physics Condensed Matter</i> , 2010 , 22, 084012	1.8	8
146	Additive coloring of thin, single crystalline MgO(001) films. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 12520-4	3.6	8
145	A portable microevaporator for low temperature single atom studies by scanning tunneling and dynamic force microscopy. <i>Review of Scientific Instruments</i> , 2009 , 80, 113705	1.7	8
144	Dynamics of the Stable Radical Di-tert-butyl Nitroxide on an Epitaxially Grown Al ₂ O ₃ Film. <i>Journal of Physical Chemistry B</i> , 1997 , 101, 3776-3780	3.4	8
143	Synthese und Struktur eines ultradünnen Alumosilicatfilms. <i>Angewandte Chemie</i> , 2006 , 118, 7798-7801	3.6	8
142	Charge-transfer shake-up satellites accompanying core ionization in organic donor/acceptor molecules: bis(4-dimethylaminophenyl)squaraine and its derivatives. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1988 , 46, 1-17	1.7	8
141	Adsorption and Reaction of CO ₂ on Metal Surfaces. Detection of an Intrinsic Precursor to Dissociation. <i>Springer Series in Surface Sciences</i> , 1987 , 164-174	0.4	8
140	Hydrogen-induced metallization on the ZnO(0001) surface. <i>Physical Review B</i> , 2018 , 98,	3.3	8
139	Transition Metal Induced Crystallization of Ultrathin Silica Films. <i>Chemistry of Materials</i> , 2017 , 29, 931-934	3.6	7
138	Vibrational Action Spectroscopy of Solids: New Surface-Sensitive Technique. <i>Physical Review Letters</i> , 2017 , 119, 136101	7.4	7
137	Interaction of water with oxide thin film model systems. <i>Journal of Materials Research</i> , 2019 , 34, 360-378	3.5	7
136	The Atomic Structure of Two-Dimensional Silica. <i>Nanoscience and Technology</i> , 2015 , 327-353	0.6	7
135	Exploring Pd adsorption, diffusion, permeation, and nucleation on bilayer SiO ₂ /Ru as a function of hydroxylation and precursor environment: From UHV to catalyst preparation. <i>Surface Science</i> , 2016 , 652, 286-293	1.8	7
134	Bindung, Aktivierung und Dissoziation von Sauerstoff an dotierten Oxiden. <i>Angewandte Chemie</i> , 2013 , 125, 11595-11598	3.6	7
133	Einstellung der Gleichgewichtsform metallischer Nanopartikel durch Dotierung des Oxidträgers. <i>Angewandte Chemie</i> , 2011 , 123, 11728-11731	3.6	7
132	Formaldehydbildung auf den Vanadiumoxidoberflächen V ₂ O ₃ (0001) und V ₂ O ₅ (001): Wie bildet sich der stabile Methoxy-Zwischenzustand?. <i>Angewandte Chemie</i> , 2009 , 121, 3750-3753	3.6	7
131	Chapter 9 Structure and electronic properties of ultrathin oxide films on metallic substrates. <i>Chemical Physics of Solid Surfaces</i> , 1997 , 8, 340-374		7
130	Interference-effects in the laser-induced desorption of small molecules from surfaces: a model study. <i>Chemical Physics</i> , 1998 , 236, 263-276	2.3	7

- 129 Preparation and structure of alumina supported niobia model catalysts. *Surface Science*, **2007**, 601, 5605-5610 7
- 128 Frequency-modulated atomic force spectroscopy on NiAl(110) partially covered with a thin alumina film. *Physical Review B*, **2006**, 73, 3-3 7
- 127 Effect of electromagnetic interactions on plasmon excitations in silver particle ensembles. *Surface Science*, **2006**, 600, 128-133 1.8 7
- 126 STM studies of ordered (31 $\bar{1}$ 1)R9 $\sqrt{3}$ CO islands on Ag(111). *Physical Review B*, **2005**, 71, 3-3 7
- 125 Laser-stimulated desorption from surfaces. *Current Opinion in Solid State and Materials Science*, **1996**, 1, 622-629 12 7
- 124 Autoionization spectroscopy of CO on metal oxide surfaces. *Journal of Electron Spectroscopy and Related Phenomena*, **1996**, 77, 155-171 1.7 7
- 123 Decoupling a Thin Well-Ordered TiO₂(110) Layer from a TiO₂(110) Substrate with a Ti + Ta Mixed Oxide Interlayer. *Journal of Physical Chemistry C*, **2016**, 120, 8185-8190 3.8 7
- 122 Growth and Atomic-Scale Characterization of Ultrathin Silica and Germania Films: The Crucial Role of the Metal Support. *Chemistry - A European Journal*, **2021**, 27, 1870-1885 4.8 7
- 121 Model systems in heterogeneous catalysis: towards the design and understanding of structure and electronic properties. *Faraday Discussions*, **2018**, 208, 307-323 3.6 7
- 120 Interaction of Gold with Oxide Nanoparticles: Size or Electronic Effect?. *Journal of Physical Chemistry C*, **2019**, 123, 12376-12381 3.8 6
- 119 Characterization of Phonon Vibrations of Silica Bilayer Films. *Journal of Physical Chemistry C*, **2019**, 123, 7110-7117 3.8 6
- 118 Effect of lattice-gas atoms on the adsorption behaviour of thioether molecules. *Physical Chemistry Chemical Physics*, **2012**, 14, 10987-93 3.6 6
- 117 Imaging and manipulation of adatoms on an alumina surface by noncontact atomic force microscopy. *Journal of Physics Condensed Matter*, **2012**, 24, 084007 1.8 6
- 116 Zero-bias conductance anomaly of a FeO-bound Au atom triggered by CO adsorption. *Physical Review B*, **2009**, 79, 3-3 6
- 115 Alkaline Earth versus Noble Metal Particles on MgO Thin Films: Growth and Optical Properties. *Journal of Physical Chemistry C*, **2009**, 113, 18740-18745 3.8 6
- 114 STRUCTURE, THERMAL STABILITY, AND CO ADSORPTION PROPERTIES OF PD NANOPARTICLES SUPPORTED ON AN ULTRA-THIN SiO₂ FILM. *Surface Review and Letters*, **2007**, 14, 927-934 1.1 6
- 113 Foreword for the Gerhard Ertl Festschrift. *Journal of Physical Chemistry B*, **2004**, 108, 14183-14186 3.4 6
- 112 Cathodoluminescence of small silver particles on Al₂O₃/NiAl (110). *Journal of Electron Spectroscopy and Related Phenomena*, **2002**, 122, 239-249 1.7 6

111	Zur elektronischen struktur von trans-chloro-methylcarbin-tetracarbonyl-chrom $\text{ClCr}(\text{CO})_4\text{CCH}_3$. <i>Journal of Organometallic Chemistry</i> , 1981 , 216, 235-243	2.3	6
110	Size Dependent CO Dissociation on Rh Particles Supported on Thin Alumina Films. <i>Springer Series in Solid-state Sciences</i> , 1996 , 210-216	0.4	6
109	Water-Assisted Homolytic Dissociation of Propyne on a Reduced Ceria Surface. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 6150-6154	16.4	5
108	Wasserbildung unter dünnen Silika-Filmen: Echtzeitbeobachtung einer chemischen Reaktion in einem physikalisch eingegrenzten Raum. <i>Angewandte Chemie</i> , 2018 , 130, 8885-8889	3.6	5
107	The Interaction of N_2 with Iron on W(110), Pd(111) and Rh(111). <i>Zeitschrift Fur Physikalische Chemie</i> , 1997 , 198, 135-147	3.1	5
106	ESR and TPD Investigations of the Adsorption of Di-tert-butyl Nitroxide on Au(111) and NiO(111). Evidence for Long-Range Interactions. <i>Journal of Magnetic Resonance</i> , 1997 , 126, 242-247	3	5
105	CO Adsorption study of V/SiO ₂ : the low vanadium coverage regime. <i>Chemical Physics Letters</i> , 2004 , 392, 127-131	2.5	5
104	Direkte Beobachtung von Radikalen bei der Aktivierung von Ziegler-Natta-Katalysatoren. <i>Angewandte Chemie</i> , 2002 , 114, 1587-1591	3.6	5
103	In-situ-Schwingungsspektroskopie zur Untersuchung der Aktivität und Adsorbatplatzbesetzung von Katalysator-Nanopartikeln. <i>Angewandte Chemie</i> , 2003 , 115, 3143-3147	3.6	5
102	UV-laser-induced desorption of NO from the pure and modified Cr ₂ O ₃ (0001) surfaces: spin effects in surface-state-induced desorption 1998 ,		5
101	Identification of shake-up satellites in valence photoelectron spectra of organic compounds by comparison with electronic absorption spectra of radical cations. Case study: Octafluoronaphthalene. <i>Chemical Physics Letters</i> , 1984 , 111, 151-156	2.5	5
100	Vapor phase x-ray core-photoelectron spectra of N,N-dimethyl-p-nitrosoaniline. An experimental and theoretical study. <i>Journal of the American Chemical Society</i> , 1986 , 108, 1801-1805	16.4	5
99	Surface Action Spectroscopy: A Review and a Perspective on a New Technique to Study Vibrations at Surfaces. <i>Chemical Record</i> , 2021 , 21, 1270-1283	6.6	5
98	Insights into Reaction Kinetics in Confined Space: Real Time Observation of Water Formation under a Silica Cover. <i>Journal of the American Chemical Society</i> , 2021 , 143, 8780-8790	16.4	5
97	CO ₂ Adsorption on CaO(001): Temperature-Programmed Desorption and Infrared Study. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 1880-1887	3.8	5
96	Scanning Tunneling Microscopy of the Ordered Water Monolayer on MgO(001)/Ag(001) Ultrathin Films. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 3711-3718	3.8	5
95	Surface action spectroscopy with rare gas messenger atoms. <i>Review of Scientific Instruments</i> , 2018 , 89, 083107	1.7	5
94	Characterizing Crystalline-Vitreous Structures: From Atomically Resolved Silica to Macroscopic Bubble Rafts. <i>Journal of Chemical Education</i> , 2015 , 92, 1896-1902	2.4	4

93	Characterization of OECenters on Single Crystalline MgO(001)-Films. <i>Topics in Catalysis</i> , 2015 , 58, 811-823.	3.3	4
92	Location of Trapped Electron Centers in the Bulk of Epitaxial MgO(001) Films Grown on Mo(001) Using in Situ W-band Electron Paramagnetic Resonance Spectroscopy. <i>Physical Review Letters</i> , 2016 , 117, 016801	7.4	4
91	Designing new catalysts: synthesis of new active structures: general discussion. <i>Faraday Discussions</i> , 2016 , 188, 131-59	3.6	4
90	The challenges of characterising nanoparticulate catalysts: general discussion. <i>Faraday Discussions</i> , 2018 , 208, 339-394	3.6	4
89	High field electron paramagnetic resonance spectroscopy under ultrahigh vacuum conditions--a multipurpose machine to study paramagnetic species on well defined single crystal surfaces. <i>Review of Scientific Instruments</i> , 2014 , 85, 083903	1.7	4
88	Autocatalytic growth of ZnO nanorods from flat Au(111)-supported ZnO films. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 26741-5	3.6	4
87	Imaging of individual adatoms on oxide surfaces by dynamic force microscopy. <i>Physical Review B</i> , 2010 , 81,	3.3	4
86	Towards an atomic level understanding of niobia based catalysts and catalysis by combining the science of catalysis with surface science. <i>Anais Da Academia Brasileira De Ciencias</i> , 2009 , 81, 297-318	1.4	4
85	From embedded nanoislands to thin films: Topographic and optical properties of europium oxide on MgO(001) films. <i>Physical Review B</i> , 2012 , 86,	3.3	4
84	Spectroscopic Characterization of Organometallic Centers on Insulator Single Crystal Surfaces:From Metal Carbonyls to Ziegler--Natta Catalysts117-149		4
83	Design of an SFG-compatible uhv-high pressure reaction cell: Studies of CO and NO adsorption on Ni and NiO(100) by IR-vis sum frequency generation vibrational spectroscopy. <i>Studies in Surface Science and Catalysis</i> , 2000 , 3131-3136	1.8	4
82	Photochemie von Methan auf Pd/Al2O3-Modellkatalysatoren: Kontrolle der Photochemie auf Bergangsmetalloberflächen. <i>Angewandte Chemie</i> , 1999 , 111, 2328-2331	3.6	4
81	Core ionization of nitrosobenzene-dimer compounds: phenazon-di-N-oxide. <i>Chemical Physics</i> , 1987 , 118, 101-112	2.3	4
80	Low Energy Excitations and Desorption Dynamics from Oxide Surfaces. <i>Springer Series in Surface Sciences</i> , 1993 , 275-283	0.4	4
79	Adsorption on Epitaxial Oxide Films as Model Systems for Heterogeneous Catalysis 1996 , 193-202		4
78	Ag/ZnO hybrid systems studied with scanning tunnelling microscopy-based luminescence spectroscopy. <i>Journal of Applied Physics</i> , 2016 , 119, 095310	2.5	4
77	Electronic properties of ultrathin O-terminated ZnO (0001) on Au (111). <i>Surface Science</i> , 2019 , 679, 259-263	2.3	4
76	Size effect in two-dimensional oxide-on-metal catalysts of CO oxidation and its connection to oxygen bonding: An experimental and theoretical approach. <i>Journal of Catalysis</i> , 2021 , 393, 100-106	7.3	4

75	Oxide Films as Catalytic Materials and Models of Real Catalysts 145-179		4
74	Influence of Substrate Bonding and Surface Morphology on Dynamic Organic Layer Growth: Perylenetetracarboxylic Dianhydride on Au(111). <i>Langmuir</i> , 2018 , 34, 5444-5453	4	3
73	Lithium-molybdate nanostructures grown on the Mo(001) surface. <i>Surface Science</i> , 2013 , 609, 78-84	1.8	3
72	Probing the luminescence of single Eu ₂ O ₃ nano-islands on MgO(001) with scanning tunneling microscopy. <i>Applied Physics Letters</i> , 2012 , 101, 013109	3-4	3
71	Enhanced atomic corrugation in dynamic force microscopy – The role of repulsive forces. <i>Applied Physics Letters</i> , 2012 , 100, 123105	3-4	3
70	Influence of Pd codeposition on the magnetic properties of Co particles on alumina/NiAl(110). <i>Journal of Chemical Physics</i> , 2008 , 129, 114703	3-9	3
69	Ultrathin Oxide Films 2008 , 1309		3
68	Principles of Chemisorption 2008 , 1375		3
67	Field electron energy spectroscopy of alumina-supported platinum adatoms. <i>Physica Status Solidi (B): Basic Research</i> , 2005 , 242, 2462-2467	1-3	3
66	Angle resolved autoionization spectra of adsorbates on metal oxide surfaces. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1995 , 72, 37-41	1-7	3
65	Adsorption and UV-Laser Desorption of NO/O/Ni(100). <i>Springer Series in Surface Sciences</i> , 1990 , 169-173	0.4	3
64	Photoemission from Ordered Physisorbed Molecular Phases N ₂ /Graphite, N ₂ and CO/Ag(111). <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1986 , 90, 228-231		3
63	Connection between the manneberg theorem and a sum rule derived in the framework of the green's-function formalism. <i>Chemical Physics Letters</i> , 1979 , 68, 222-224	2-5	3
62	Spiral high-speed scanning tunneling microscopy: Tracking atomic diffusion on the millisecond timescale. <i>Applied Physics Letters</i> , 2021 , 119, 251601	3-4	3
61	Continuous network structure of two-dimensional silica across a supporting metal step edge: An atomic scale study. <i>Physical Review Materials</i> , 2021 , 5,	3-2	3
60	Apparatus for low temperature thermal desorption spectroscopy of portable samples. <i>Review of Scientific Instruments</i> , 2016 , 87, 045103	1-7	3
59	Thermodesorption of CO and NO from Vacuum-Cleaved NiO(100) and MgO(100) 1999 , 173, 93		3
58	Growth of well-ordered iron sulfide thin films. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 20204-20210	0.6	2

57	Kooperative Bildung einer langreichweitig geordneten Wasserschicht auf der Fe ₃ O ₄ (111)-Oberfläche. <i>Angewandte Chemie</i> , 2018 , 130, 1423-1428	3.6	2
56	Catalyst design from theory to practice: general discussion. <i>Faraday Discussions</i> , 2016 , 188, 279-307	3.6	2
55	LEED I/V determination of the structure of a MoO ₃ monolayer on Au(111): Testing the performance of the CMA-ES evolutionary strategy algorithm, differential evolution, a genetic algorithm and tensor LEED based structural optimization. <i>Surface Science</i> , 2016 , 649, 90-100	1.8	2
54	Acetylene Reactivity on Pd/Au Nanoparticles Supported on Thin Silica Films: The Role of the Underlying Substrate. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 17425-17431	3.8	2
53	A portable quartz micro balance for physical vapor deposition techniques. <i>Review of Scientific Instruments</i> , 2013 , 84, 085118	1.7	2
52	Role of the V ₂ O ₃ (0001) Defect Structure in the Adsorption of Au Adatoms. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 3404-3409	3.8	2
51	Palladium-Monomere, -Dimere und -Trimere auf der MgO(001)-Oberfläche: Betrachtung einzelner Cluster. <i>Angewandte Chemie</i> , 2007 , 119, 8858-8861	3.6	2
50	A reverse pendulum bath cryostat design suitable for low temperature scanning probe microscopy. <i>Measurement Science and Technology</i> , 2005 , 16, 859-864	2	2
49	Angular resolved autoionization spectroscopy of N ₂ on Ni(110). <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1995 , 70, 197-206	1.7	2
48	Orientation and Dynamics of NO ₂ in a N ₂ O ₄ Host Matrix Prepared on a Plane Surface Investigated by ESR Line Shape Analysis. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 9242-9246		2
47	Coherent forward emission (CFE) from adsorbed molecules: (B B)R ₃₀ and. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1996 , 77, 33-40	1.7	2
46	Chapter 9 Molecular Chemisorption. <i>Studies in Surface Science and Catalysis</i> , 1992 , 74, 319-370	1.8	2
45	Mesoscopic Structures and Coexisting Phases in Silica Films.. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 3736-3742	3.8	2
44	Assessing the film-substrate interaction in germania films on reconstructed Au(111). <i>Physical Review B</i> , 2019 , 100,	3.3	2
43	Gold-Decorated Biphasic Fe ₂ O ₃ (0001): Activation by CO-Induced Surface Reduction. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 8221-8227	3.8	2
42	Model Systems for Heterogeneous Catalysis: Quo Vadis Surface Science?. <i>Fundamental and Applied Catalysis</i> , 2002 , 103-145	1	2
41	A high-speed variable-temperature ultrahigh vacuum scanning tunneling microscope with spiral scan capabilities. <i>Review of Scientific Instruments</i> , 2022 , 93, 053704	1.7	2
40	From Crystalline to Amorphous Germanium Bilayer Films at the Atomic Scale: Preparation and Characterization. <i>Angewandte Chemie</i> , 2019 , 131, 11019-11024	3.6	1

39	A Silica Bilayer Supported on Ru(0001): Following the Crystalline-to Vitreous Transformation in Real Time with Spectro-microscopy. <i>Angewandte Chemie</i> , 2020 , 132, 10674-10680	3.6	1
38	Wasserunterstützte homolytische Dissoziation von Propin auf reduzierter Ceroxidoberfläche. <i>Angewandte Chemie</i> , 2020 , 132, 6206-6211	3.6	1
37	Surface Reactivity of Titania/Vanadia Mixed Oxides Under Oxidizing Conditions. <i>Topics in Catalysis</i> , 2018 , 61, 792-799	2.3	1
36	Theory as a driving force to understand reactions on nanoparticles: general discussion. <i>Faraday Discussions</i> , 2018 , 208, 147-185	3.6	1
35	Analysis of the Broadening of X-ray Photoelectron Spectroscopy Peaks for Ionic Crystals. <i>Angewandte Chemie</i> , 2011 , 123, 10356-10359	3.6	1
34	Cover Picture: CO Oxidation as a Prototypical Reaction for Heterogeneous Processes (Angew. Chem. Int. Ed. 43/2011). <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 9993-9993	16.4	1
33	4.4 Model Systems in Catalysis for Energy Economy 2012 ,		1
32	Local Melting of the NiAl Substrate Under Deposited Pd Clusters During Irradiation in a Transmission Electron Microscope. <i>Crystal Research and Technology</i> , 2000 , 35, 745-749	1.3	1
31	Velocity Distributions after Laser-Induced Desorption of NO from NiO(100) – The Role of the Angular Coordinate. <i>Israel Journal of Chemistry</i> , 1998 , 38, 321-327	3.4	1
30	A low stray light, high current, low energy electron source. <i>Review of Scientific Instruments</i> , 1999 , 70, 3886-3888	1.7	1
29	Surface Science Studies of Molecular Adsorbates on Solid: A Series of Case Studies 1992 , 37-70		1
28	Clean and Modified Oxide Surfaces: Structure and Dynamics of Adsorbed Molecules 1996 , 233-265		1
27	Water and Carbon Dioxide Adsorption on CaO(001) Studied via Single Crystal Adsorption Calorimetry. <i>Topics in Catalysis</i> , 1	2.3	1
26	Electronic structure of reduced CeO ₂ (111) surfaces interacting with hydrogen as revealed through electron energy loss spectroscopy in comparison with theoretical investigations. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2021 , 147088	1.7	1
25	Dynamics in the O(2 × 1) adlayer on Ru(0001): bridging timescales from milliseconds to minutes by scanning tunneling microscopy. <i>Physical Chemistry Chemical Physics</i> ,	3.6	1
24	Thin Oxide Films as Model Systems for Heterogeneous Catalysts. <i>Springer Handbooks</i> , 2020 , 267-328	1.3	0
23	Electron-Stimulated Hydroxylation of Silica Bilayer Films Grown on Ru(0001): A Combined HREELS and EPR Study. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 7956-7964	3.8	0
22	Adsorption and Decomposition of Glycerol on Pristine and Oxygen Modified Au(111) Surfaces. <i>Topics in Catalysis</i> , 2019 , 62, 1053-1066	2.3	

- 21 Publications of Hans-Joachim Freund. *Journal of Physical Chemistry C*, **2019**, 123, 7512-7520 3.8
- 20 Binding Behavior of Carbonmonoxide to Gold Atoms on Ag(001). *Topics in Catalysis*, **2020**, 63, 1578-1584 2.3
- 19 Surface Science Approach to Catalyst Preparation Using Thin Oxide Films as Substrates **2018**, 632-642
- 18 John T. Yates, Jr. 1935-2015. *Angewandte Chemie - International Edition*, **2015**, 54, 14225 16.4
- 17 Model Catalysts Based on Au Clusters and Nanoparticles. *Structure and Bonding*, **2013**, 91-138 0.9
- 16 Titelbild: Die CO-Oxidation als Modellreaktion für heterogene Prozesse (Angew. Chem. 43/2011). *Angewandte Chemie*, **2011**, 123, 10171-10171 3.6
- 15 Molecules on well-structured oxide surfaces. *Chemical Physics of Solid Surfaces*, **2001**, 9, 326-372
- 14 Metal particles on oxide surfaces: structure and adsorption behaviour. *Studies in Surface Science and Catalysis*, **2000**, 311-316 1.8
- 13 Adsorption on Metals. *Handbook of Surface Science*, **2000**, 669-747
- 12 Laser-induced desorption of NO from NiO(100): ab-initio and wave-packet calculations **1998**, 3272, 177
- 11 NEXAFS measurements of the molecular ordering in the boundary layers of liquid crystalline free standing films. *Liquid Crystals*, **1999**, 26, 1713-1716 2.3
- 10 Optical spectra of two-dimensional butadiene iron tricarbonyl in the adsorbed state. *Physical Review B*, **1987**, 35, 4060-4066 3.3
- 9 3.9.1 Introduction - 3.9.11 NiO 1-41
- 8 3.9.12 RuO₂ - 3.9.18 Tables of selected adsorbate properties 1-33
- 7 Molecules on Clean and Modified Oxide Surfaces **2000**, 91-128
- 6 From Real World Catalysis to Surface Science and Back: Can Nanoscience Help to Bridge the Gap? **2003**, 65-92
- 5 Perturbation Theory of a Relativistic Particle in Central Fields **1983**, 501-521
- 4 Electronic Excitations at Oxide Surfaces. *Springer Series in Solid-state Sciences*, **1996**, 65-77 0.4

- 3 Concept and Design of the SMART Spectromicroscope at BESSY II **1998**, 271-282
- 2 Transfer of 2D Silica Films **2018**, 360-366
- 1 Interaction of CO₂ with well-ordered iron sulfide films on Au(111). *Surface Science*, **2021**, 710, 121853 1.8