Marcus Baeumer

List of Publications by Year
in descending order

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237 papers	14,316 citations	19608 61 h-index	24179 110 g-index
249 all docs	249 docs citations	249 times ranked	11273 citing authors

#	Article	IF	Citations
1	Nanoporous Gold Catalysts for Selective Gas-Phase Oxidative Coupling of Methanol at Low Temperature. Science, 2010, 327, 319-322.	6.0	1,022
2	Metal deposits on well-ordered oxide films. Progress in Surface Science, 1999, 61, 127-198.	3.8	931
3	Surface-chemistry-driven actuation in nanoporousÂgold. Nature Materials, 2009, 8, 47-51.	13.3	488
4	Gold Catalysts: Nanoporous Gold Foams. Angewandte Chemie - International Edition, 2006, 45, 8241-8244.	7.2	476
5	Structure and defects of an ordered alumina film on NiAl(110). Surface Science, 1994, 318, 61-73.	0.8	311
6	Nanoporous gold: a new material for catalytic and sensor applications. Physical Chemistry Chemical Physics, 2010, 12, 12919.	1.3	306
7	Palladium Nanocrystals onAl2O3: Structure and Adhesion Energy. Physical Review Letters, 1999, 83, 4120-4123.	2.9	302
8	The application of infrared spectroscopy to probe the surface morphology of alumina-supported palladium catalysts. Journal of Chemical Physics, 2005, 123, 174706.	1.2	276
9	Vibrational spectra of alumina- and silica-supported vanadia revisited: An experimental and theoretical model catalyst study. Journal of Catalysis, 2004, 226, 88-100.	3.1	258
10	Ultralow Loading Pt Nanocatalysts Prepared by Atomic Layer Deposition on Carbon Aerogels. Nano Letters, 2008, 8, 2405-2409.	4.5	244
11	Nanoporous Au: An Unsupported Pure Gold Catalyst?. Journal of Physical Chemistry C, 2009, 113, 5593-5600.	1.5	232
12	ALD Functionalized Nanoporous Gold: Thermal Stability, Mechanical Properties, and Catalytic Activity. Nano Letters, 2011, 11, 3085-3090.	4.5	212
13	Size and Support Effects for CO Adsorption on Gold Model Catalysts. Catalysis Letters, 2003, 86, 211-219.	1.4	166
14	From atoms to crystallites: adsorption on oxide-supported metal particles. Physical Chemistry Chemical Physics, 2000, 2, 3723-3737.	1.3	165
15	Hydroxy1 driven reconstruction of the polar NiO(111) surface. Surface Science, 1994, 315, L977-L982.	0.8	163
16	Infrared spectroscopic investigation of CO adsorbed on Pd aggregates deposited on an alumina model support. Surface Science, 1998, 399, 190-198.	0.8	161
17	Preparation and characterization of model catalysts: from ultrahigh vacuum to in situ conditions at the atomic dimension. Journal of Catalysis, 2003, 216, 223-235.	3.1	155
18	Structure Sensitivity of CO Dissociation on Rh Surfaces. Catalysis Letters, 2002, 81, 153-156.	1.4	153

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19	Strong relaxations at the Cr2O3(0001) surface as determined via low-energy electron diffraction and molecular dynamics simulations. Surface Science, 1997, 372, L291-L297.	0.8	140
20	Structureâ€“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.	3.1	135
21	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.	0.8	129
22	Title is missing!. Topics in Catalysis, 2001, 15, 201-209.	1.3	129
23	Silver residues as a possible key to a remarkable oxidative catalytic activity of nanoporous gold. Physical Chemistry Chemical Physics, 2011, 13, 4529.	1.3	121
24	Interaction of rhodium with hydroxylated alumina model substrates. Surface Science, 1997, 384, 106-119.	0.8	119
25	Surface Chemistry in Nanoscale Materials. Materials, 2009, 2, 2404-2428.	1.3	119
26	Universal Phenomena of CO Adsorption on Gold Surfaces with Low-Coordinated Sites. Journal of Physical Chemistry C, 2007, 111, 445-451.	1.5	116
27	Catalysis by Unsupported Skeletal Gold Catalysts. Accounts of Chemical Research, 2014, 47, 731-739.	7.6	114
28	Interaction of oxygen with palladium deposited on a thin alumina film. Surface Science, 2002, 501, 270-281.	0.8	111
29	Nanoporous Gold as a Platform for a Building Block Catalyst. ACS Catalysis, 2012, 2, 2199-2215.	5.5	108
30	The structure of Pt-aggregates on a supported thin aluminum oxide film in comparison with unsupported alumina: a transmission electron microscopy study. Surface Science, 1997, 391, 27-36.	0.8	106
31	Oxygenâ€Mediated Coupling of Alcohols over Nanoporous Gold Catalysts at Ambient Pressures. Angewandte Chemie - International Edition, 2012, 51, 1698-1701.	7.2	106
32	Adsorption and reaction of methanol on supported palladium catalysts: microscopic-level studies from ultrahigh vacuum to ambient pressure conditions. Physical Chemistry Chemical Physics, 2007, 9, 3541-3558.	1.3	100
33	Electronic structure and growth of vanadium on TiO2(110). Surface Science, 2000, 450, 12-26.	0.8	96
34	Probing Degradation by IL-TEM: The Influence of Stress Test Conditions on the Degradation Mechanism. Journal of the Electrochemical Society, 2013, 160, F608-F615.	1.3	96
35	Preparation and Characterization of a Model Bimetallic Catalyst: Coâ€“Pd Nanoparticles Supported on Al2O3. Angewandte Chemie - International Edition, 2002, 41, 4073-4076.	7.2	95
36	Nanostructured Praseodymium Oxide:â€‰ Preparation, Structure, and Catalytic Properties. Journal of Physical Chemistry C, 2008, 112, 3054-3063.	1.5	95

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37	Study of CO adsorption on crystalline-silica-supported palladium particles. Surface Science, 2002, 498, L71-L77.	0.8	94
38	Pt/Sn Intermetallic, Core/Shell and Alloy Nanoparticles: Colloidal Synthesis and Structural Control. Chemistry of Materials, 2013, 25, 1400-1407.	3.2	88
39	Model Catalyst Studies on Vanadia Particles Deposited onto a Thin-Film Alumina Support. 1. Structural Characterization. Journal of Physical Chemistry B, 2002, 106, 8756-8761.	1.2	86
40	The interaction of oxygen with alumina-supported palladium particles. Catalysis Letters, 2001, 71, 5-13.	1.4	85
41	Morphological and electronic properties of ultrathin crystalline silica epilayers on a Mo(112) substrate. Physical Review B, 2002, 66, .	1.1	85
42	The Structure and Reactivity of Al2O3-Supported Cobaltâ˜'Palladium Particles:â€‰ A CO-TPD, STM, and XPS Study. Journal of Physical Chemistry B, 2003, 107, 778-785.	1.2	84
43	Metalâ€"oxide interaction for metal clusters on a metal-supported thin alumina film. Surface Science, 1999, 442, L964-L970.	0.8	83
44	On the thermal stability of metal particles supported on a thin alumina film. Surface Science, 2003, 523, 103-110.	0.8	83
45	Nanoporous gold: a new gold catalyst with tunable properties. Faraday Discussions, 2011, 152, 87.	1.6	82
46	Bimetallic Coâ€"Pd catalysts: Study of preparation methods and their influence on the selective hydrogenation of acetylene. Journal of Catalysis, 2013, 300, 125-135.	3.1	81
47	Particle size dependent CO dissociation on alumina-supported Rh: a model study. Chemical Physics Letters, 1997, 279, 92-99.	1.2	80
48	Supported colloidal nanoparticles in heterogeneous gas phase catalysis: on the way to tailored catalysts. Physical Chemistry Chemical Physics, 2011, 13, 19270.	1.3	80
49	Adsorption on a polar oxide surface: O2, C2H4and Na on Cr2O3(0001)/Cr(110). Faraday Discussions, 1996, 105, 295-315.	1.6	78
50	The influence of OH groups on the growth of rhodium on alumina: a model study. Catalysis Letters, 2000, 68, 19-24.	1.4	77
51	Nucleation and growth of transition metals on a thin alumina film. Surface Science, 2000, 454-456, 957-962.	0.8	75
52	Structural rearrangement and surface magnetism on oxide surfaces: a temperature-dependent low-energy electron diffraction-electron energy loss spectroscopy study of Cr2O3(111)/Cr(110). Journal of Physics Condensed Matter, 1995, 7, 5289-5301.	0.7	74
53	Catalysis and surface science: What do we learn from studies of oxide-supported cluster model systems?. Advances in Catalysis, 2000, 45, 333-384.	0.1	71
54	The particle proximity effect: from model to high surface area fuel cell catalysts. RSC Advances, 2014, 4, 14971.	1.7	70

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55	Adsorption on oxide surfaces: structure and dynamics. Surface Science, 1994, 307-309, 1148-1160.	0.8	68
56	Determination of Atomic Structure of the Metal-Oxide Interface: Pd Nanodeposits on an FeO(111) Film. Physical Review Letters, 2003, 91, 076102.	2.9	68
57	Ligand Capping of Colloidally Synthesized Nanoparticlesâ€"A Way to Tune Metalâ€"Support Interactions in Heterogeneous Gasâ€Phase Catalysis. Angewandte Chemie - International Edition, 2011, 50, 3888-3891.	7.2	68
58	Metal Atoms and Particles on Oxide Supports:â€‰ Probing Structure and Charge by Infrared Spectroscopy. Journal of Physical Chemistry B, 2001, 105, 8569-8576.	1.2	65
59	Pt based PEMFC catalysts prepared from colloidal particle suspensions â€" a toolbox for model studies. Physical Chemistry Chemical Physics, 2013, 15, 3602.	1.3	64
60	Interaction of CO with Pd clusters supported on a thin alumina film. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1996, 14, 1546-1551.	0.9	63
61	Infrared study of CO adsorption on alumina supported palladium particles. Surface Science, 1998, 402-404, 428-432.	0.8	62
62	Effect of Carbon Deposits on Reactivity of Supported Pd Model Catalysts. Catalysis Letters, 2002, 80, 115-122.	1.4	62
63	Structural and Chemical Effects of Plasma Treatment on Closeâ€Packed Colloidal Nanoparticle Layers. Advanced Functional Materials, 2008, 18, 2398-2410.	7.8	62
64	CO dissociation characteristics on size-distributed rhodium islands on alumina model substrates. Journal of Chemical Physics, 1998, 108, 2967-2974.	1.2	58
65	Vibrational spectroscopy of CO adsorbed on supported ultra-small transition metal particles and single metal atoms. Surface Science, 2000, 454-456, 968-973.	0.8	58
66	Structural characterization of platinum deposits supported on ordered alumina films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1994, 12, 2259-2264.	0.9	57
67	Highly active Coâ€"Al₂O₃-based catalysts for CO₂ methanation with very low platinum promotion prepared by double flame spray pyrolysis. Catalysis Science and Technology, 2016, 6, 7449-7460.	2.1	57
68	Ligand-Capped Pt Nanocrystals as Oxide-Supported Catalysts: FTIR Spectroscopic Investigations of the Adsorption and Oxidation of CO. Angewandte Chemie - International Edition, 2007, 46, 2923-2926.	7.2	55
69	Heterogeneous catalysis with supported platinum colloids: A systematic study of the interplay between support and functional ligands. Journal of Catalysis, 2011, 278, 143-152.	3.1	55
70	Colloidal Synthesis and Structural Control of PtSn Bimetallic Nanoparticles. Langmuir, 2011, 27, 11052-11061.	1.6	55
71	Double flame spray pyrolysis as a novel technique to synthesize alumina-supported cobalt Fischerâ€"Tropsch catalysts. Catalysis Today, 2013, 214, 90-99.	2.2	55
72	A synchrotron study of the deposition of vanadia on TiO2(110). Surface Science, 1999, 432, 178-188.	0.8	54

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73	Pd nanoparticles with highly defined structure on MgO as model catalysts: An FTIR study of the interaction with CO, O2, and H2 under ambient conditions. Journal of Catalysis, 2007, 247, 145-154.	3.1	54
74	Vibrational structure of excited states of molecules on oxide surfaces. Journal of Electron Spectroscopy and Related Phenomena, 1993, 64-65, 217-225.	0.8	53
75	Oxygen-inducedp(2Ã—3)reconstruction on Mo(112) studied by LEED and STM. Physical Review B, 2002, 65, .	1.1	53
76	Cluster, facets, and edges: Site-dependent selective chemistry on model catalysts. Chemical Record, 2003, 3, 181-201.	2.9	53
77	Metal deposition in adsorbate atmosphere: growth and decomposition of a palladium carbonyl-like species. Surface Science, 1996, 346, 108-126.	0.8	52
78	Accumulation of Iron Oxide Nanoparticles by Cultured Brain Astrocytes. Journal of Biomedical Nanotechnology, 2009, 5, 285-293.	0.5	52
79	Structure investigation of the topmost layer of a thin ordered alumina film grown on NiAl(110) by low temperature scanning tunneling microscopy. Chemical Physics Letters, 2002, 359, 41-47.	1.2	51
80	Toward Controlled Modification of Nanoporous Gold. A Detailed Surface Science Study on Cleaning and Oxidation. Journal of Physical Chemistry C, 2012, 116, 4564-4571.	1.5	51
81	Growth and morphology of Rh deposits on an alumina film under UHV conditions and under the influence of CO. Surface Science, 1997, 391, 204-215.	0.8	50
82	Phonons of clean and metal-modified oxide films: an infrared and HREELS study. Surface Science, 2001, 492, 270-284.	0.8	50
83	CO2 methanation and reverse water gas shift reaction. Kinetic study based on in situ spatially-resolved measurements. Chemical Engineering Journal, 2020, 390, 124629.	6.6	50
84	A fast and sensitive catalytic gas sensors for hydrogen detection based on stabilized nanoparticles as catalytic layer. Sensors and Actuators B: Chemical, 2014, 193, 895-903.	4.0	49
85	Synthesis and Properties of Porous Hybrid Materials containing Metallic Nanoparticles. Advanced Engineering Materials, 2008, 10, 241-245.	1.6	48
86	Oxide-supported Rh particle structure probed with carbon monoxide. Surface Science, 1999, 427-428, 288-293.	0.8	45
87	New gold and silver-gold catalysts in the shape of sponges and sieves. Gold Bulletin, 2007, 40, 142-149.	3.2	45
88	Influence of Organic Amino and Thiol Ligands on the Geometric and Electronic Surface Properties of Colloidally Prepared Platinum Nanoparticles. Journal of Physical Chemistry C, 2014, 118, 8925-8932.	1.5	45
89	Effects of Li Doping on MgO-Supported Sm₂O₃ and TbO_{<i>x</i>} Catalysts in the Oxidative Coupling of Methane. ACS Catalysis, 2014, 4, 1972-1990.	5.5	45
90	In situ investigation of pore clogging during discharge of a Li/O2 battery by electrochemical impedance spectroscopy. Journal of Power Sources, 2015, 278, 255-264.	4.0	45

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91	Growth, electronic properties and reactivity of vanadium deposited onto a thin alumina film. Surface Science, 1999, 432, 189-198.	0.8	44
92	Alumina-Supported Vanadium Nanoparticles:Â Structural Characterization and CO Adsorption Properties. Journal of the American Chemical Society, 2004, 126, 3616-3626.	6.6	43
93	Transition from a molecular to a metallic adsorbate system:mCore-hole creation and decay dynamics for CO coordinated to Pd. Physical Review B, 1997, 55, 7233-7243.	1.1	41
94	Single crystalline silicon dioxide films on Mo(112). Solid-State Electronics, 2001, 45, 1471-1478.	0.8	41
95	Chemisorbed Oxygen on the Au(321) Surface Alloyed with Silver: A First-Principles Investigation. Journal of Physical Chemistry C, 2015, 119, 9215-9226.	1.5	41
96	Surface structure of Coâ€"Pd bimetallic particles supported on Al2O3 thin films studied using infrared reflection absorption spectroscopy of CO. Journal of Chemical Physics, 2003, 119, 10885-10894.	1.2	40
97	Effect of Surface Chemistry on the Stability of Gold Nanostructures. Langmuir, 2010, 26, 13736-13740.	1.6	40
98	A synchrotron study of the growth of vanadium oxide on Al2O3(0001). Surface Science, 1999, 441, 1-9.	0.8	37
99	On the Role of Oxygen in Stabilizing Low-Coordinated Au Atoms. ChemPhysChem, 2006, 7, 1906-1908.	1.0	37
100	CO oxidation on nanoporous gold: A combined TPD and XPS study of active catalysts. Surface Science, 2013, 609, 106-112.	0.8	37
101	Steam reforming of methanol over oxide decorated nanoporous gold catalysts: a combined in situ FTIR and flow reactor study. Physical Chemistry Chemical Physics, 2017, 19, 8880-8888.	1.3	37
102	The temperature dependent growth mode of nickel on the basal plane of graphite. Surface Science, 1995, 327, 321-329.	0.8	36
103	Growth of well-ordered silicon dioxide films on Mo(112). Microelectronics Reliability, 2000, 40, 841-844.	0.9	36
104	Effects of particle size, composition, and support on catalytic activity of AuAg nanoparticles prepared in reverse block copolymer micelles as nanoreactors. Journal of Catalysis, 2013, 299, 222-231.	3.1	36
105	Electron spectroscopy studies of small deposited metal particles. Journal of Electron Spectroscopy and Related Phenomena, 1995, 76, 301-306.	0.8	35
106	STM studies of rhodium deposits on an ordered alumina film-resolution and tip effects. Surface Science, 1998, 402-404, 424-427.	0.8	35
107	Using IR intensities as a probe for studying the surface chemical bond. Surface Science, 2003, 546, L829-L835.	0.8	35
108	Oxidation of Alumina-Supported Co and Coâ˘'Pd Model Catalysts for the Fischerâ˘'Tropsch Reaction. Journal of Physical Chemistry C, 2007, 111, 8566-8572.	1.5	35

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109	Colloidally Prepared Pt Nanoparticles for Heterogeneous Gasâ€Phase Catalysis: Influence of Ligand Shell and Catalyst Loading on CO Oxidation Activity. ChemCatChem, 2010, 2, 198-205.	1.8	35
110	A solâ€“gel methodology for the preparation of lanthanide-oxide aerogels: preparation and characterization. Journal of Sol-Gel Science and Technology, 2012, 64, 381-389.	1.1	35
111	Maximizing Activity and Stability by Turning Gold Catalysis Upside Down: Oxide Particles on Nanoporous Gold. ChemCatChem, 2013, 5, 2037-2043.	1.8	35
112	Nanostructured Praseodymium Oxide: Correlation Between Phase Transitions and Catalytic Activity. ChemCatChem, 2010, 2, 694-704.	1.8	33
113	Role of Palladium in Iron Based Fischerâˆ’Tropsch Catalysts Prepared by Flame Spray Pyrolysis. Journal of Physical Chemistry C, 2011, 115, 1302-1310.	1.5	33
114	Stabilization of the ceria Î¹-phase (Ce7O12) surface on Si(111). Applied Physics Letters, 2013, 102, .	1.5	33
115	Fluid distribution and pore wettability of monolithic carbon xerogels measured by 1H NMR relaxation. Carbon, 2014, 68, 542-552.	5.4	31
116	Photoemission study of praseodymia in its highest oxidation state: The necessity of <i>in situ</i> plasma treatment. Journal of Chemical Physics, 2011, 134, 054701.	1.2	30
117	Structural transitions of epitaxial ceria films on Si(111). Physical Chemistry Chemical Physics, 2013, 15, 18589.	1.3	30
118	A versatile solâ€“gel coating for mixed oxides on nanoporous gold and their application in the water gas shift reaction. Catalysis Science and Technology, 2016, 6, 5311-5319.	2.1	30
119	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.	0.9	29
120	Colloidally Prepared Nanoparticles for the Synthesis of Structurally Wellâ€Defined and Highly Active Heterogeneous Catalysts. Angewandte Chemie - International Edition, 2008, 47, 8946-8949.	7.2	29
121	Synthesis of stable AuAg bimetallic nanoparticles encapsulated by diblock copolymer micelles. Nanoscale, 2012, 4, 1658.	2.8	29
122	Distribution of discharge products inside of the lithium/oxygen battery cathode. Journal of Power Sources, 2015, 299, 162-169.	4.0	29
123	Cobalt@Silica Coreâ€Shell Catalysts for Hydrogenation of CO/CO₂ Mixtures to Methane. ChemCatChem, 2019, 11, 4884-4893.	1.8	29
124	Insights into the reaction mechanism and particle size effects of CO oxidation over supported Pt nanoparticle catalysts. Journal of Catalysis, 2019, 377, 662-672.	3.1	29
125	Evidence for Pdx(CO)y compound formation on an alumina substrate. Chemical Physics Letters, 1995, 240, 429-434.	1.2	28
126	Growth and electronic structure of vanadium on Î±-Al2O3(0001). Surface Science, 2000, 449, 50-60.	0.8	28

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127	Decomposition of methanol by Pd, Co, and bimetallic Coâ€“Pd catalysts: A combined study of well-defined systems under ambient and UHV conditions. Journal of Catalysis, 2008, 256, 24-36.	3.1	28
128	The growth of vanadium oxide on alumina and titania single crystal surfaces. Faraday Discussions, 1999, 114, 67-84.	1.6	27
129	A miniaturized catalytic gas sensor for hydrogen detection based on stabilized nanoparticles as catalytic layer. Sensors and Actuators B: Chemical, 2013, 187, 420-425.	4.0	27
130	Nanoporous Gold-Supported Ceria for the Waterâ€“Gas Shift Reaction: UHV Inspired Design for Applied Catalysis. Journal of Physical Chemistry C, 2014, 118, 29270-29277.	1.5	27
131	Colloidal Nanoparticles Embedded in Ceramers: Toward Structurally Designed Catalysts. Journal of Physical Chemistry C, 2010, 114, 14224-14232.	1.5	26
132	CO oxidation by co-adsorbed atomic O on the Au(321) surface with Ag impurities: A mechanistic study from first-principles calculations. Chemical Physics Letters, 2012, 525-526, 87-91.	1.2	26
133	Growth and Partial Reduction of Sm₂O₃(111) Thin Films on Pt(111): Evidence for the Formation of SmO(100). Journal of Physical Chemistry C, 2013, 117, 21396-21406.	1.5	26
134	Controlling the physics and chemistry of binary and ternary praseodymium and cerium oxide systems. Physical Chemistry Chemical Physics, 2015, 17, 24513-24540.	1.3	26
135	Rational Design of Functional Oxide Thin Films with Embedded Magnetic or Plasmonic Metallic Nanoparticles. Angewandte Chemie - International Edition, 2011, 50, 9957-9960.	7.2	25
136	Stabilizing Catalytically Active Nanoparticles by Ligand Linking: Toward Three-Dimensional Networks with High Catalytic Surface Area. Langmuir, 2014, 30, 5564-5573.	1.6	25
137	Oxygen-Driven Surface Evolution of Nanoporous Gold: Insights from Ab Initio Molecular Dynamics and Auger Electron Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 5349-5357.	1.5	25
138	Heteroepitaxial praseodymium sesquioxide films on Si(111): A new model catalyst system for praseodymium oxide based catalysts. Surface Science, 2007, 601, 1473-1480.	0.8	24
139	Intrinsically green iron oxide nanoparticles? From synthesis via (eco-)toxicology to scenario modelling. Nanoscale, 2013, 5, 1034-1046.	2.8	24
140	Highly Active Sm2O3â€Ni Xerogel Catalysts for CO2Methanation. ChemCatChem, 2019, 11, 1732-1741.	1.8	24
141	From single crystal model catalysts to systematic studies of supported nanoparticles. Surface Science, 2015, 631, 278-284.	0.8	23
142	Two-dimensional growth of Pd on a thin FeO(111) film: a physical manifestation of strong metalâ€“support interaction. Surface Science, 2003, 546, L813-L819.	0.8	22
143	Metal Support Interactions in Co3O4/Al2O3 Catalysts Prepared from w/o Microemulsions. Catalysis Letters, 2012, 142, 830-837.	1.4	22
144	Quantitative Phase Composition of TiO₂-Coated Nanoporous Au Monoliths by X-ray Absorption Spectroscopy and Correlations to Catalytic Behavior. Journal of Physical Chemistry C, 2014, 118, 4078-4084.	1.5	22

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145	Independent control over residual silver content of nanoporous gold by galvanodynamically controlled dealloying. Nanoscale, 2018, 10, 17166-17173.	2.8	22
146	Electronic and geometric structure of adsorbates on oxide surfaces. Journal of Electron Spectroscopy and Related Phenomena, 1994, 68, 347-355.	0.8	21
147	Model Catalyst Studies on Vanadia Particles Deposited onto a Thin-Film Alumina Support. 2. Interaction with Carbon Monoxide. Journal of Physical Chemistry B, 2003, 107, 9003-9010.	1.2	21
148	Ethylene diamine-assisted synthesis of iron oxide nanoparticles in high-boiling polyolys. Journal of Colloid and Interface Science, 2014, 417, 188-198.	5.0	21
149	IR spectroscopy of a Pd-carbonyl surface compound. Chemical Physics Letters, 1997, 277, 513-520.	1.2	20
150	Colloidally Prepared Pt Nanowires versus Impregnated Pt Nanoparticles: Comparison of Adsorption and Reaction Properties. Langmuir, 2010, 26, 16330-16338.	1.6	20
151	Bimetallic AuAg Nanoparticles: Enhancing the Catalytic Activity of Au for Reduction Reactions in the Liquid Phase by Addition of Ag. ChemPhysChem, 2013, 14, 1577-1581.	1.0	20
152	Adsorption and Diffusion of Hydrogen on the Surface of the Pt₂₄ Subnanoparticle. A DFT Study. Journal of Physical Chemistry C, 2016, 120, 18570-18587.	1.5	20
153	Effects of Particle Size on Strong Metalâ€“Support Interactions Using Colloidal â€œSurfactant-Freeâ€•Pt Nanoparticles Supported on Fe₃O₄. ACS Catalysis, 2020, 10, 4136-4150.	5.5	19
154	Composition-dependent sintering behaviour of chemically synthesised CuNi nanoparticles and their application in aerosol printing for preparation of conductive microstructures. Colloid and Polymer Science, 2012, 290, 941-952.	1.0	18
155	Ligand-stabilized Pt nanoparticles (NPs) as novel materials for catalytic gas sensing: influence of the ligand on important catalytic properties. Physical Chemistry Chemical Physics, 2014, 16, 21243-21251.	1.3	18
156	Oxidative Coupling of Alcohols and Amines over Bimetallic Unsupported Nanoporous Gold: Tailored Activity through Mechanistic Predictability. ChemCatChem, 2015, 7, 70-74.	1.8	18
157	On the support dependency of the CO₂ methanation â€“ decoupling size and support effects. Catalysis Science and Technology, 2021, 11, 4098-4114.	2.1	18
158	Absence of Subsurface Oxygen Effects in the Oxidation of Olefins on Au: Styrene Oxidation over Sputtered Au(111). Journal of Physical Chemistry C, 2009, 113, 8924-8929.	1.5	17
159	Novel catalytic gas sensors based on functionalized nanoparticle layers. Sensors and Actuators B: Chemical, 2012, 174, 145-152.	4.0	17
160	Surface Functionalization of Iron Oxide Nanoparticles and their Stability in Different Media. ChemPlusChem, 2012, 77, 576-583.	1.3	17
161	Enhanced catalytic methane coupling using novel ceramic foams with bimodal porosity. Catalysis Science and Technology, 2013, 3, 89-93.	2.1	17
162	Temperature-Dependent Reduction of Epitaxial Ce_{1â€“<i>x</i>}Pr_{<i>x</i>}O_{2âˆ'Î´} (<i>x</i> = 0â€“1) Thin Films on Si(111): A Combined Temperature-Programmed Desorption, X-ray Diffraction, X-ray Photoelectron Spectroscopy, and Raman Study. Journal of Physical Chemistry C, 2013, 117, 24851-24857.	1.5	17

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163	Temperature Modulation of a Catalytic Gas Sensor. Sensors, 2014, 14, 20372-20381.	2.1	17
164	Methanol oxidation on the Au(3â€¯1â€¯0) surface: A theoretical study. Journal of Catalysis, 2018, 364, 216-227.	3.1	17
165	Halideâ€Induced Leaching of Pt Nanoparticles â€“ Manipulation of Particle Size by Controlled Ostwald Ripening. ChemNanoMat, 2019, 5, 462-471.	1.5	17
166	Novel nanoparticle catalysts for catalytic gas sensing. Catalysis Science and Technology, 2016, 6, 339-348.	2.1	16
167	CVD of Conducting Ultrathin Copper Films. Journal of the Electrochemical Society, 2009, 156, D452.	1.3	15
168	The origin of a large apparent tortuosity factor for the Knudsen diffusion inside monoliths of a samariaâ€“alumina aerogel catalyst: a diffusion NMR study. Physical Chemistry Chemical Physics, 2015, 17, 27481-27487.	1.3	15
169	Influence of Sn content on the hydrogenation of crotonaldehyde catalysed by colloidally prepared PtSn nanoparticles. Physical Chemistry Chemical Physics, 2015, 17, 28186-28192.	1.3	15
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