

Marcus Baeumer

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240
papers

12,568
citations

58
h-index

104
g-index

248
ext. papers

13,314
ext. citations

4.9
avg, IF

6.15
L-index

#	Paper	IF	Citations
240	Nanoporous gold catalysts for selective gas-phase oxidative coupling of methanol at low temperature. <i>Science</i> , 2010 , 327, 319-22	33.3	914
239	Metal deposits on well-ordered oxide films. <i>Progress in Surface Science</i> , 1999 , 61, 127-198	6.6	832
238	Surface-chemistry-driven actuation in nanoporous gold. <i>Nature Materials</i> , 2009 , 8, 47-51	27	432
237	Gold catalysts: nanoporous gold foams. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 8241-4	16.4	423
236	Palladium Nanocrystals on Al ₂ O ₃ : Structure and Adhesion Energy. <i>Physical Review Letters</i> , 1999 , 83, 4129-4123	28.2	282
235	Structure and defects of an ordered alumina film on NiAl(110). <i>Surface Science</i> , 1994 , 318, 61-73	1.8	278
234	Nanoporous gold: a new material for catalytic and sensor applications. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 12919-30	3.6	261
233	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
232	Ultralow loading Pt nanocatalysts prepared by atomic layer deposition on carbon aerogels. <i>Nano Letters</i> , 2008 , 8, 2405-9	11.5	225
231	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
230	Nanoporous Au: An Unsupported Pure Gold Catalyst?. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 5593-5600	6.0	205
229	ALD functionalized nanoporous gold: thermal stability, mechanical properties, and catalytic activity. <i>Nano Letters</i> , 2011 , 11, 3085-90	11.5	190
228	From atoms to crystallites: adsorption on oxide-supported metal particles. <i>Physical Chemistry Chemical Physics</i> , 2000 , 2, 3723-3737	3.6	154
227	Hydroxy1 driven reconstruction of the polar NiO(111) surface. <i>Surface Science</i> , 1994 , 315, L977-L982	1.8	149
226	Size and Support Effects for CO Adsorption on Gold Model Catalysts. <i>Catalysis Letters</i> , 2003 , 86, 211-219	2.8	145
225	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
224	Structure Sensitivity of CO Dissociation on Rh Surfaces. <i>Catalysis Letters</i> , 2002 , 81, 153-156	2.8	135

223	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
222	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
221	The structure of thin NiO(100) films grown on Ni(100) as determined by low-energy-electron diffraction and scanning tunneling microscopy. <i>Surface Science</i> , 1991 , 253, 116-128	1.8	115
220	Structure-Reactivity Relationships on Supported Metal Model Catalysts: Adsorption and Reaction of Ethene and Hydrogen on Pd/Al ₂ O ₃ /NiAl(110). <i>Journal of Catalysis</i> , 2001 , 200, 330-339	7.3	112
219	Bridging the pressure and materials gaps between catalysis and surface science: clean and modified oxide surfaces. <i>Topics in Catalysis</i> , 2001 , 15, 201-209	2.3	110
218	Silver residues as a possible key to a remarkable oxidative catalytic activity of nanoporous gold. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 4529-39	3.6	107
217	Interaction of rhodium with hydroxylated alumina model substrates. <i>Surface Science</i> , 1997 , 384, 106-119	1.8	104
216	Surface Chemistry in Nanoscale Materials. <i>Materials</i> , 2009 , 2, 2404-2428	3.5	102
215	Catalysis by unsupported skeletal gold catalysts. <i>Accounts of Chemical Research</i> , 2014 , 47, 731-9	24.3	101
214	Interaction of oxygen with palladium deposited on a thin alumina film. <i>Surface Science</i> , 2002 , 501, 270-281	1.8	100
213	Universal Phenomena of CO Adsorption on Gold Surfaces with Low-Coordinated Sites. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 445-451	3.8	99
212	Oxygen-mediated coupling of alcohols over nanoporous gold catalysts at ambient pressures. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 1698-701	16.4	93
211	Nanoporous Gold as a Platform for a Building Block Catalyst. <i>ACS Catalysis</i> , 2012 , 2, 2199-2215	13.1	93
210	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
209	Electronic structure and growth of vanadium on TiO ₂ (110). <i>Surface Science</i> , 2000 , 450, 12-26	1.8	89
208	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
207	Probing Degradation by IL-TEM: The Influence of Stress Test Conditions on the Degradation Mechanism. <i>Journal of the Electrochemical Society</i> , 2013 , 160, F608-F615	3.9	87
206	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, 3541-358	3.6	87

205	Study of CO adsorption on crystalline-silica-supported palladium particles. <i>Surface Science</i> , 2002 , 498, L71-L77	1.8	86
204	Morphological and electronic properties of ultrathin crystalline silica epilayers on a Mo(112) substrate. <i>Physical Review B</i> , 2002 , 66,	3.3	81
203	Pt/Sn Intermetallic, Core/Shell and Alloy Nanoparticles: Colloidal Synthesis and Structural Control. <i>Chemistry of Materials</i> , 2013 , 25, 1400-1407	9.6	80
202	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
201	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
200	Metal-oxide interaction for metal clusters on a metal-supported thin alumina film. <i>Surface Science</i> , 1999 , 442, L964-L970	1.8	78
199	On the thermal stability of metal particles supported on a thin alumina film. <i>Surface Science</i> , 2003 , 523, 103-110	1.8	75
198	Particle size dependent CO dissociation on alumina-supported Rh: a model study. <i>Chemical Physics Letters</i> , 1997 , 279, 92-99	2.5	74
197	Nanostructured Praseodymium Oxide: Preparation, Structure, and Catalytic Properties. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 3054-3063	3.8	74
196	The interaction of oxygen with alumina-supported palladium particles. <i>Catalysis Letters</i> , 2001 , 71, 5-13	2.8	74
195	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
194	Nucleation and growth of transition metals on a thin alumina film. <i>Surface Science</i> , 2000 , 454-456, 957-962	2.8	72
193	Supported colloidal nanoparticles in heterogeneous gas phase catalysis: on the way to tailored catalysts. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 19270-84	3.6	68
192	Bimetallic Co/Pd catalysts: Study of preparation methods and their influence on the selective hydrogenation of acetylene. <i>Journal of Catalysis</i> , 2013 , 300, 125-135	7.3	66
191	Nanoporous gold: a new gold catalyst with tunable properties. <i>Faraday Discussions</i> , 2011 , 152, 87-98; discussion 99-120	3.6	66
190	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
189	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
188	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

187	The particle proximity effect: from model to high surface area fuel cell catalysts. <i>RSC Advances</i> , 2014 , 4, 14971	3.7	63
186	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
185	Adsorption on oxide surfaces: structure and dynamics. <i>Surface Science</i> , 1994 , 307-309, 1148-1160	1.8	63
184	Ligand capping of colloiddally synthesized nanoparticles--a way to tune metal-support interactions in heterogeneous gas-phase catalysis. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 3888-91	16.4	62
183	Interaction of CO with Pd clusters supported on a thin alumina film. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1996 , 14, 1546-1551	2.9	60
182	Pt based PEMFC catalysts prepared from colloidal particle suspensions--a toolbox for model studies. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 3602-8	3.6	58
181	Infrared study of CO adsorption on alumina supported palladium particles. <i>Surface Science</i> , 1998 , 402-404, 428-432	1.8	57
180	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
179	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
178	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
177	Effect of Carbon Deposits on Reactivity of Supported Pd Model Catalysts. <i>Catalysis Letters</i> , 2002 , 80, 115-122	2.8	53
176	A synchrotron study of the deposition of vanadia on TiO ₂ (110). <i>Surface Science</i> , 1999 , 432, 178-188	1.8	52
175	Heterogeneous catalysis with supported platinum colloids: A systematic study of the interplay between support and functional ligands. <i>Journal of Catalysis</i> , 2011 , 278, 143-152	7.3	51
174	Structural characterization of platinum deposits supported on ordered alumina films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1994 , 12, 2259-2264	2.9	51
173	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
172	Colloidal synthesis and structural control of PtSn bimetallic nanoparticles. <i>Langmuir</i> , 2011 , 27, 11052-614		50
171	Structural and Chemical Effects of Plasma Treatment on Close-Packed Colloidal Nanoparticle Layers. <i>Advanced Functional Materials</i> , 2008 , 18, 2398-2410	15.6	50
170	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

169	Cluster, facets, and edges: site-dependent selective chemistry on model catalysts. <i>Chemical Record</i> , 2003 , 3, 181-201	6.6	49
168	Oxygen-induced p(2B) reconstruction on Mo(112) studied by LEED and STM. <i>Physical Review B</i> , 2002 , 65,	3.3	49
167	Toward Controlled Modification of Nanoporous Gold. A Detailed Surface Science Study on Cleaning and Oxidation. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 4564-4571	3.8	48
166	Accumulation of iron oxide nanoparticles by cultured brain astrocytes. <i>Journal of Biomedical Nanotechnology</i> , 2009 , 5, 285-93	4	48
165	Ligand-capped Pt nanocrystals as oxide-supported catalysts: FTIR spectroscopic investigations of the adsorption and oxidation of CO. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 2923-6	16.4	47
164	Pd nanoparticles with highly defined structure on MgO as model catalysts: An FTIR study of the interaction with CO, O ₂ , and H ₂ under ambient conditions. <i>Journal of Catalysis</i> , 2007 , 247, 145-154	7.3	46
163	Synthesis and Properties of Porous Hybrid Materials containing Metallic Nanoparticles. <i>Advanced Engineering Materials</i> , 2008 , 10, 241-245	3.5	46
162	Phonons of clean and metal-modified oxide films: an infrared and HREELS study. <i>Surface Science</i> , 2001 , 492, 270-284	1.8	46
161	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
160	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
159	Highly active CoAl ₂ O ₃ -based catalysts for CO ₂ methanation with very low platinum promotion prepared by double flame spray pyrolysis. <i>Catalysis Science and Technology</i> , 2016 , 6, 7449-7460	5.5	43
158	Double flame spray pyrolysis as a novel technique to synthesize alumina-supported cobalt Fischer-Tropsch catalysts. <i>Catalysis Today</i> , 2013 , 214, 90-99	5.3	43
157	Oxide-supported Rh particle structure probed with carbon monoxide. <i>Surface Science</i> , 1999 , 427-428, 288-293	1.8	41
156	Influence of Organic Amino and Thiol Ligands on the Geometric and Electronic Surface Properties of Colloidally Prepared Platinum Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 8925-8932	3.8	40
155	Effects of Li Doping on MgO-Supported Sm ₂ O ₃ and TbO _x Catalysts in the Oxidative Coupling of Methane. <i>ACS Catalysis</i> , 2014 , 4, 1972-1990	13.1	40
154	New gold and silver-gold catalysts in the shape of sponges and sieves 2007 , 40, 142-149		40
153	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
152	In situ investigation of pore clogging during discharge of a Li/O ₂ battery by electrochemical impedance spectroscopy. <i>Journal of Power Sources</i> , 2015 , 278, 255-264	8.9	39

151	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
150	Single crystalline silicon dioxide films on Mo(1 1 2). <i>Solid-State Electronics</i> , 2001 , 45, 1471-1478	1.7	39
149	A fast and sensitive catalytic gas sensors for hydrogen detection based on stabilized nanoparticles as catalytic layer. <i>Sensors and Actuators B: Chemical</i> , 2014 , 193, 895-903	8.5	38
148	Effect of surface chemistry on the stability of gold nanostructures. <i>Langmuir</i> , 2010 , 26, 13736-40	4	38
147	Goldkatalysatoren: Nanoporöse Gold-Schwämme. <i>Angewandte Chemie</i> , 2006 , 118, 8421-8425	3.6	38
146	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
145	Growth, electronic properties and reactivity of vanadium deposited onto a thin alumina film. <i>Surface Science</i> , 1999 , 432, 189-198	1.8	38
144	Effects of particle size, composition, and support on catalytic activity of AuAg nanoparticles prepared in reverse block copolymer micelles as nanoreactors. <i>Journal of Catalysis</i> , 2013 , 299, 222-231	7.3	36
143	A synchrotron study of the growth of vanadium oxide on Al ₂ O ₃ (0001). <i>Surface Science</i> , 1999 , 441, 1-9	1.8	36
142	The temperature dependent growth mode of nickel on the basal plane of graphite. <i>Surface Science</i> , 1995 , 327, 321-329	1.8	36
141	On the role of oxygen in stabilizing low-coordinated Au atoms. <i>ChemPhysChem</i> , 2006 , 7, 1906-8	3.2	35
140	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
139	Growth of well-ordered silicon dioxide films on Mo(112). <i>Microelectronics Reliability</i> , 2000 , 40, 841-844	1.2	34
138	Colloidally Prepared Pt Nanoparticles for Heterogeneous Gas-Phase Catalysis: Influence of Ligand Shell and Catalyst Loading on CO Oxidation Activity. <i>ChemCatChem</i> , 2010 , 2, 198-205	5.2	33
137	Oxidation of Alumina-Supported Co and CoPd Model Catalysts for the Fischer-Tropsch Reaction. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 8566-8572	3.8	33
136	Using IR intensities as a probe for studying the surface chemical bond. <i>Surface Science</i> , 2003 , 546, L829-L835		33
135	Electron spectroscopy studies of small deposited metal particles. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1995 , 76, 301-306	1.7	33
134	Chemisorbed Oxygen on the Au(321) Surface Alloyed with Silver: A First-Principles Investigation. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 9215-9226	3.8	32

133	Maximizing Activity and Stability by Turning Gold Catalysis Upside Down: Oxide Particles on Nanoporous Gold. <i>ChemCatChem</i> , 2013 , 5, 2037-2043	5.2	32
132	CO oxidation on nanoporous gold: A combined TPD and XPS study of active catalysts. <i>Surface Science</i> , 2013 , 609, 106-112	1.8	32
131	Steam reforming of methanol over oxide decorated nanoporous gold catalysts: a combined in situ FTIR and flow reactor study. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 8880-8888	3.6	30
130	Role of Palladium in Iron Based Fischer-Tropsch Catalysts Prepared by Flame Spray Pyrolysis. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 1302-1310	3.8	29
129	Synthesis of stable AuAg bimetallic nanoparticles encapsulated by diblock copolymer micelles. <i>Nanoscale</i> , 2012 , 4, 1658-64	7.7	27
128	Stabilization of the ceria β phase (Ce ₇ O ₁₂) surface on Si(111). <i>Applied Physics Letters</i> , 2013 , 102, 111602	3.4	27
127	Decomposition of methanol by Pd, Co, and bimetallic CoPd catalysts: A combined study of well-defined systems under ambient and UHV conditions. <i>Journal of Catalysis</i> , 2008 , 256, 24-36	7.3	27
126	Growth and electronic structure of vanadium on γ -Al ₂ O ₃ (0001). <i>Surface Science</i> , 2000 , 449, 50-60	1.8	27
125	The growth of vanadium oxide on alumina and titania single crystal surfaces. <i>Faraday Discussions</i> , 1999 , 114, 67-84	3.6	27
124	A versatile sol-gel coating for mixed oxides on nanoporous gold and their application in the water gas shift reaction. <i>Catalysis Science and Technology</i> , 2016 , 6, 5311-5319	5.5	27
123	A sol-gel methodology for the preparation of lanthanide-oxide aerogels: preparation and characterization. <i>Journal of Sol-Gel Science and Technology</i> , 2012 , 64, 381-389	2.3	26
122	Colloidally prepared nanoparticles for the synthesis of structurally well-defined and highly active heterogeneous catalysts. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 8946-9	16.4	26
121	Evidence for Pd _x (CO) _y compound formation on an alumina substrate. <i>Chemical Physics Letters</i> , 1995 , 240, 429-434	2.5	26
120	Colloidal Nanoparticles Embedded in Ceramers: Toward Structurally Designed Catalysts. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 14224-14232	3.8	25
119	Photoemission study of praseodymium in its highest oxidation state: the necessity of in situ plasma treatment. <i>Journal of Chemical Physics</i> , 2011 , 134, 054701	3.9	25
118	Fluid distribution and pore wettability of monolithic carbon xerogels measured by ¹ H NMR relaxation. <i>Carbon</i> , 2014 , 68, 542-552	10.4	24
117	Intrinsically green iron oxide nanoparticles? From synthesis via (eco-)toxicology to scenario modelling. <i>Nanoscale</i> , 2013 , 5, 1034-46	7.7	24
116	Heteroepitaxial praseodymium sesquioxide films on Si(111): A new model catalyst system for praseodymium oxide based catalysts. <i>Surface Science</i> , 2007 , 601, 1473-1480	1.8	24

115	Nanoporous Gold-Supported Ceria for the Water-Gas Shift Reaction: UHV Inspired Design for Applied Catalysis. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 29270-29277	3.8	23
114	Growth and Partial Reduction of Sm ₂ O ₃ (111) Thin Films on Pt(111): Evidence for the Formation of SmO(100). <i>Journal of Physical Chemistry C</i> , 2013 , 117, 21396-21406	3.8	23
113	Rational design of functional oxide thin films with embedded magnetic or plasmonic metallic nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 9957-60	16.4	23
112	Adsorption and reaction of ethene on oxide-supported Pd, Rh, and Ir particles. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2001 , 19, 1497-1501	2.9	23
111	From single crystal model catalysts to systematic studies of supported nanoparticles. <i>Surface Science</i> , 2015 , 631, 278-284	1.8	22
110	CO ₂ methanation and reverse water gas shift reaction. Kinetic study based on in situ spatially-resolved measurements. <i>Chemical Engineering Journal</i> , 2020 , 390, 124629	14.7	22
109	CO oxidation by co-adsorbed atomic O on the Au(321) surface with Ag impurities: A mechanistic study from first-principles calculations. <i>Chemical Physics Letters</i> , 2012 , 525-526, 87-91	2.5	22
108	Metal Support Interactions in Co ₃ O ₄ /Al ₂ O ₃ Catalysts Prepared from w/o Microemulsions. <i>Catalysis Letters</i> , 2012 , 142, 830-837	2.8	22
107	Nanostructured Praseodymium Oxide: Correlation Between Phase Transitions and Catalytic Activity. <i>ChemCatChem</i> , 2010 , 2, 694-704	5.2	22
106	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
105	Distribution of discharge products inside of the lithium/oxygen battery cathode. <i>Journal of Power Sources</i> , 2015 , 299, 162-169	8.9	21
104	A miniaturized catalytic gas sensor for hydrogen detection based on stabilized nanoparticles as catalytic layer. <i>Sensors and Actuators B: Chemical</i> , 2013 , 187, 420-425	8.5	21
103	Structural transitions of epitaxial ceria films on Si(111). <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 18589-99	3.6	21
102	Stabilizing catalytically active nanoparticles by ligand linking: toward three-dimensional networks with high catalytic surface area. <i>Langmuir</i> , 2014 , 30, 5564-73	4	20
101	Quantitative Phase Composition of TiO ₂ -Coated Nanoporous Au Monoliths by X-ray Absorption Spectroscopy and Correlations to Catalytic Behavior. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 4078-4084	3.8	20
100	Ethylene diamine-assisted synthesis of iron oxide nanoparticles in high-boiling polyols. <i>Journal of Colloid and Interface Science</i> , 2014 , 417, 188-98	9.3	20
99	Colloidally prepared Pt nanowires versus impregnated Pt nanoparticles: comparison of adsorption and reaction properties. <i>Langmuir</i> , 2010 , 26, 16330-8	4	20
98	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

97	Independent control over residual silver content of nanoporous gold by galvanodynamically controlled dealloying. <i>Nanoscale</i> , 2018 , 10, 17166-17173	7.7	19
96	Controlling the physics and chemistry of binary and ternary praseodymium and cerium oxide systems. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 24513-40	3.6	18
95	Cobalt@Silica Core-Shell Catalysts for Hydrogenation of CO/CO ₂ Mixtures to Methane. <i>ChemCatChem</i> , 2019 , 11, 4884-4893	5.2	18
94	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
93	Bimetallic AuAg nanoparticles: enhancing the catalytic activity of Au for reduction reactions in the liquid phase by addition of Ag. <i>ChemPhysChem</i> , 2013 , 14, 1577-81	3.2	17
92	Adsorption and Diffusion of Hydrogen on the Surface of the Pt ₂₄ Subnanoparticle. A DFT Study. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 18570-18587	3.8	17
91	Insights into the reaction mechanism and particle size effects of CO oxidation over supported Pt nanoparticle catalysts. <i>Journal of Catalysis</i> , 2019 , 377, 662-672	7.3	16
90	Ligand-stabilized Pt nanoparticles (NPs) as novel materials for catalytic gas sensing: influence of the ligand on important catalytic properties. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 21243-51	3.6	16
89	Enhanced catalytic methane coupling using novel ceramic foams with bimodal porosity. <i>Catalysis Science and Technology</i> , 2013 , 3, 89-93	5.5	16
88	Absence of Subsurface Oxygen Effects in the Oxidation of Olefins on Au: Styrene Oxidation over Sputtered Au(111). <i>Journal of Physical Chemistry C</i> , 2009 , 113, 8924-8929	3.8	16
87	IR spectroscopy of a Pd-carbonyl surface compound. <i>Chemical Physics Letters</i> , 1997 , 277, 513-520	2.5	16
86	Highly Active Sm ₂ O ₃ -Ni Xerogel Catalysts for CO ₂ Methanation. <i>ChemCatChem</i> , 2019 , 11, 1732-1741	5.2	16
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