Marcus Baeumer

List of Publications by Year in Descending Order

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	Thermal Activation of Nanoporous Gold for Carbon Monoxide Oxidation. *Journal of Physical Chemistry C*, **2022**, 126, 1770-1777	3.8	0
239	Comparing Co-catalytic Effects of ZrOx, SmOx, and Pt on COx Methanation over Co-based Catalysts Prepared by Double Flame Spray Pyrolysis. *ChemCatChem*, **2021**, 13, 2815-2831	5.2	1
238	Synthesis and Characterization of Ligand-Linked Pt Nanoparticles: Tunable, Three-Dimensional, Porous Networks for Catalytic Hydrogen Sensing. *ChemistryOpen*, **2021**, 10, 697-712	2.3	1
237	Effects of low molar concentrations of low-valence dopants on samarium oxide xerogels in the oxidative coupling of methane. *Catalysis Today*, **2021**, 365, 58-70	5.3	3
236	Doped samarium oxide xerogels for oxidative coupling of methane□Effects of high-valence dopants at very low concentrations. *Catalysis Today*, **2021**, 365, 46-57	5.3	8
235	On the support dependency of the CO2 methanation □decoupling size and support effects. *Catalysis Science and Technology*, **2021**, 11, 4098-4114	5.5	5
234	Effects of Particle Size on Strong Metal□Support Interactions Using Colloidal □Surfactant-Free□Pt Nanoparticles Supported on Fe3O4. *ACS Catalysis*, **2020**, 10, 4136-4150	13.1	13
233	CO2 methanation and reverse water gas shift reaction. Kinetic study based on in situ spatially-resolved measurements. *Chemical Engineering Journal*, **2020**, 390, 124629	14.7	22
232	What Changes on the Inverse Catalyst? Insights from CO Oxidation on Au-Supported Ceria Nanoparticles Using Ab Initio Molecular Dynamics. *ACS Catalysis*, **2020**, 10, 3164-3174	13.1	5
231	Characterization of a highly sensitive and selective hydrogen gas sensor employing Pt nanoparticle network catalysts based on different bifunctional ligands. *Sensors and Actuators B: Chemical*, **2020**, 322, 128619	8.5	3
230	Assessment of PBE+U and HSE06 methods and determination of optimal parameter U for the structural and energetic properties of rare earth oxides. *Journal of Chemical Physics*, **2020**, 153, 164710	3.9	5
229	Highly Sensitive and Selective Hydrogen Gas Sensor with Platinum Nanoparticles Linked by 4,4"-Diamino-P-Terphenyl (Dater) **2019**,		1
228	Insights into the reaction mechanism and particle size effects of CO oxidation over supported Pt nanoparticle catalysts. *Journal of Catalysis*, **2019**, 377, 662-672	7.3	16
227	Nanoporous gold functionalized with praseodymia-titania mixed oxides as a stable catalyst for the water-gas shift reaction. *Physical Chemistry Chemical Physics*, **2019**, 21, 3278-3286	3.6	7
226	Aerobic Methanol Oxidation over Unsupported Nanoporous Gold: The Influence of an Added Base. *Catalysts*, **2019**, 9, 416	4	5
225	Ligand-Linked Nanoparticles-Based Hydrogen Gas Sensor with Excellent Homogeneous Temperature Field and a Comparative Stability Evaluation of Different Ligand-Linked Catalysts. *Sensors*, **2019**, 19,	3.8	5
224	Hans-Joachim Freund and Joachim Sauer Preface. *Journal of Physical Chemistry C*, **2019**, 123, 7495-7498	3.8	

223	Cobalt@Silica Core-Shell Catalysts for Hydrogenation of CO/CO2 Mixtures to Methane. *ChemCatChem*, **2019**, 11, 4884-4893	5.2	18
222	Design and Fabrication Challenges of a Highly Sensitive Thermoelectric-Based Hydrogen Gas Sensor. *Micromachines*, **2019**, 10,	3.3	3
221	Highly Active Sm2O3-Ni Xerogel Catalysts for CO2 Methanation. *ChemCatChem*, **2019**, 11, 1732-1741	5.2	16
220	Halide-Induced Leaching of Pt Nanoparticles Manipulation of Particle Size by Controlled Ostwald Ripening. *ChemNanoMat*, **2019**, 5, 462-471	3.5	14
219	Methanol oxidation on the Au(3 1 0) surface: A theoretical study. *Journal of Catalysis*, **2018**, 364, 216-227	7.3	9
218	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	3.8	12
217	Independent control over residual silver content of nanoporous gold by galvanodynamically controlled dealloying. *Nanoscale*, **2018**, 10, 17166-17173	7.7	19
216	Catalytic Micro Gas Sensor with Excellent Homogeneous Temperature Distribution and Low Power Consumption for Long-Term Stable Operation. *Proceedings (mdpi)*, **2018**, 2, 927	0.3	1
215	The Influence of the Pyrolysis Temperature on the Material Properties of Cobalt and Nickel Containing Precursor Derived Ceramics and their Catalytic Use for CO2 Methanation and Fischer Tropsch Synthesis. *Catalysis Letters*, **2017**, 147, 472-482	2.8	10
214	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	3.6	30
213	Highly active Co 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	5.5	43
212	CO and D2O chemistry on continuous and discontinuous samaria thin films on Pt(111). *Surface Science*, **2016**, 650, 221-229	1.8	0
211	On the suppression of background signals originating from NMR hardware components. Application to zero echo time imaging and relaxation time analysis. *Magnetic Resonance Imaging*, **2016**, 34, 264-70	3.3	3
210	Novel nanoparticle catalysts for catalytic gas sensing. *Catalysis Science and Technology*, **2016**, 6, 339-348	5.5	14
209	XPS study of thermal and electron-induced decomposition of Ni and Co acetylacetonate thin films for metal deposition. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2016** , 34, 041515	2.9	10
208	A versatile sol 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	5.5	27
207	Coatings of active and heat-resistant cobalt-aluminium xerogel catalysts. *Journal of Colloid and Interface Science*, **2016**, 477, 64-73	9.3	4
206	Adsorption and Diffusion of Hydrogen on the Surface of the Pt24 Subnanoparticle. A DFT Study. *Journal of Physical Chemistry C*, **2016**, 120, 18570-18587	3.8	17

205	Chemisorbed Oxygen on the Au(321) Surface Alloyed with Silver: A First-Principles Investigation. *Journal of Physical Chemistry C*, **2015**, 119, 9215-9226	3.8	32
204	Investigation of the Growth Behaviour of Cobalt Thin Films from Chemical Vapour Deposition, Using Directly Coupled X-ray Photoelectron Spectroscopy. *Zeitschrift Fur Physikalische Chemie*, **2015** , 229, 1887-1905	3.1	6
203	Distribution of discharge products inside of the lithium/oxygen battery cathode. *Journal of Power Sources*, **2015**, 299, 162-169	8.9	21
202	Influence of Sn content on the hydrogenation of crotonaldehyde catalysed by colloidally prepared PtSn nanoparticles. *Physical Chemistry Chemical Physics*, **2015**, 17, 28186-92	3.6	13
201	Controlling the physics and chemistry of binary and ternary praseodymium and cerium oxide systems. *Physical Chemistry Chemical Physics*, **2015**, 17, 24513-40	3.6	18
200	From single crystal model catalysts to systematic studies of supported nanoparticles. *Surface Science*, **2015**, 631, 278-284	1.8	22
199	Oxidative Coupling of Alcohols and Amines over Bimetallic Unsupported Nanoporous Gold: Tailored Activity through Mechanistic Predictability. *ChemCatChem*, **2015**, 7, 70-74	5.2	10
198	Methanol Adsorption and Reaction on Samaria Thin Films on Pt(111). *Materials*, **2015**, 8, 6228-6256	3.5	5
197	Sol□Gel Preparation of Samaria Catalysts for the Oxidative Coupling of Methane. *Catalysis Letters*, **2015**, 145, 1251-1261	2.8	10
196	Growth, Structure, and Stability of the High-Index TbOx(112) Surface on Cu(111). *Journal of Physical Chemistry C*, **2015**, 119, 14175-14184	3.8	10
195	The origin of a large apparent tortuosity factor for the Knudsen diffusion inside monoliths of a samaria-alumina aerogel catalyst: a diffusion NMR study. *Physical Chemistry Chemical Physics*, **2015**, 17, 27481-7	3.6	12
194	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	8.9	39
193	1-Naphthylamine functionalized Pt nanoparticles: electrochemical activity and redox chemistry occurring on one surface. *New Journal of Chemistry*, **2015**, 39, 2557-2564	3.6	12
192	Influence of Water on Chemical Vapor Deposition of Ni and Co thin films from ethanol solutions of acetylacetonate precursors. *Scientific Reports*, **2015**, 5, 18194	4.9	12
191	Sol-gel preparation of alumina stabilized rare earth areo- and xerogels and their use as oxidation catalysts. *Journal of Colloid and Interface Science*, **2014**, 422, 71-8	9.3	5
190	Stabilizing catalytically active nanoparticles by ligand linking: toward three-dimensional networks with high catalytic surface area. *Langmuir*, **2014**, 30, 5564-73	4	20
189	PtxCo1□ alloy NPs prepared by colloidal tool-box synthesis: The effect of de-alloying on the oxygen reduction reaction activity. *International Journal of Hydrogen Energy*, **2014**, 39, 9143-9148	6.7	7
188	Catalysis by unsupported skeletal gold catalysts. *Accounts of Chemical Research*, **2014**, 47, 731-9	24.3	101

187	Design of a compact ultrahigh vacuum-compatible setup for the analysis of chemical vapor deposition processes. *Review of Scientific Instruments*, **2014**, 85, 104104	1.7	5
186	Nanoporous Gold-Supported Ceria for the Water Gas Shift Reaction: UHV Inspired Design for Applied Catalysis. *Journal of Physical Chemistry C*, **2014**, 118, 29270-29277	3.8	23
185	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, 21243-51	3.6	16
184	Structural Changes of Ultrathin Cub-PrO2(111)/Si(111) Films Due to Thermally Induced Oxygen Desorption. *Journal of Physical Chemistry C*, **2014**, 118, 3056-3061	3.8	9
183	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	3.8	20
182	The particle proximity effect: from model to high surface area fuel cell catalysts. *RSC Advances*, **2014**, 4, 14971	3.7	63
181	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	3.8	40
180	A versatile synthetic strategy for nanoporous gold/organic hybrid materials for electrochemistry and photocatalysis. *Tetrahedron*, **2014**, 70, 6127-6133	2.4	10
179	Generation of Pt- and Pt/Zn-containing ceramers and their structuring as macro/microporous foams. *Chemical Engineering Journal*, **2014**, 247, 205-215	14.7	7
178	Fluid distribution and pore wettability of monolithic carbon xerogels measured by 1H NMR relaxation. *Carbon*, **2014**, 68, 542-552	10.4	24
177	Effects of Li Doping on MgO-Supported Sm2O3 and TbOx Catalysts in the Oxidative Coupling of Methane. *ACS Catalysis*, **2014**, 4, 1972-1990	13.1	40
176	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	8.5	38
175	Influence of calcium carbonate and slip agent addition on linear medium density polyethylene processed by rotational molding. *Materials Research*, **2014**, 17, 130-137	1.5	6
174	Temperature modulation of a catalytic gas sensor. *Sensors*, **2014**, 14, 20372-81	3.8	11
173	Ethylene diamine-assisted synthesis of iron oxide nanoparticles in high-boiling polyolys. *Journal of Colloid and Interface Science*, **2014**, 417, 188-98	9.3	20
172	A miniaturized catalytic gas sensor for hydrogen detection based on stabilized nanoparticles as catalytic layer. *Sensors and Actuators B: Chemical*, **2013**, 187, 420-425	8.5	21
171	Maximizing Activity and Stability by Turning Gold Catalysis Upside Down: Oxide Particles on Nanoporous Gold. *ChemCatChem*, **2013**, 5, 2037-2043	5.2	32
170	Double flame spray pyrolysis as a novel technique to synthesize alumina-supported cobalt Fischer Tropsch catalysts. *Catalysis Today*, **2013**, 214, 90-99	5.3	43

169	Alumina-promoted cobalt and iron xerogels as catalyst for the Fischer□Tropsch synthesis. *Catalysis Science and Technology*, **2013**, 3, 3256	5.5	7
168	Pt based PEMFC catalysts prepared from colloidal particle suspensions--a toolbox for model studies. *Physical Chemistry Chemical Physics*, **2013**, 15, 3602-8	3.6	58
167	Structural transitions of epitaxial ceria films on Si(111). *Physical Chemistry Chemical Physics*, **2013**, 15, 18589-99	3.6	21
166	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	7.3	36
165	Enhanced catalytic methane coupling using novel ceramic foams with bimodal porosity. *Catalysis Science and Technology*, **2013**, 3, 89-93	5.5	16
164	Intrinsically green iron oxide nanoparticles? From synthesis via (eco-)toxicology to scenario modelling. *Nanoscale*, **2013**, 5, 1034-46	7.7	24
163	Controlled modification of nanoporous gold: Chemical vapor deposition of TiO2 in ultrahigh vacuum. *Applied Surface Science*, **2013**, 282, 439-443	6.7	7
162	Improving the quality of nanoparticle production by using a new biphasic synthesis in a slug flow microreactor. *Chemical Engineering Journal*, **2013**, 228, 1083-1091	14.7	10
161	CO oxidation on nanoporous gold: A combined TPD and XPS study of active catalysts. *Surface Science*, **2013**, 609, 106-112	1.8	32
160	Pt/Sn Intermetallic, Core/Shell and Alloy Nanoparticles: Colloidal Synthesis and Structural Control. *Chemistry of Materials*, **2013**, 25, 1400-1407	9.6	80
159	Bimetallic AuAg nanoparticles: enhancing the catalytic activity of Au for reduction reactions in the liquid phase by addition of Ag. *ChemPhysChem*, **2013**, 14, 1577-81	3.2	17
158	Bimetallic Co□Pd catalysts: Study of preparation methods and their influence on the selective hydrogenation of acetylene. *Journal of Catalysis*, **2013**, 300, 125-135	7.3	66
157	Impact of Organic Ligands on the Structure and Hydrogenation Performance of Colloidally Prepared Bimetallic PtSn Nanoparticles. *ChemCatChem*, **2013**, 5, 1803-1810	5.2	12
156	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	3.8	23
155	Temperature-Dependent Reduction of Epitaxial Ce1□PrxO2□(x = 0□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	3.8	15
154	Probing Degradation by IL-TEM: The Influence of Stress Test Conditions on the Degradation Mechanism. *Journal of the Electrochemical Society*, **2013**, 160, F608-F615	3.9	87
153	Investigation of a Nanoporous Gold / TiO2 Catalyst by Electron Microscopy and Tomography. *Materials Research Society Symposia Proceedings*, **2013**, 1504, 1		
152	Stabilization of the ceria □phase (Ce7O12) surface on Si(111). *Applied Physics Letters*, **2013**, 102, 111602	3.4	27

151	Study of Carbon Dioxide Transport in a Samaria Aerogel Catalyst by High Field Diffusion NMR. *Chemie-Ingenieur-Technik*, **2013**, 85, 1749-1754	0.8	1
150	Self-diffusion of carbon dioxide in samaria/alumina aerogel catalyst using high field NMR diffusometry. *Journal of Chemical Physics*, **2013**, 139, 154703	3.9	6
149	Colloidally prepared platinum nanoparticles deposited on iron oxide studied by XAFS. *Journal of Physics: Conference Series*, **2013**, 430, 012058	0.3	1
148	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	2.5	22
147	Oxygen-mediated coupling of alcohols over nanoporous gold catalysts at ambient pressures. *Angewandte Chemie - International Edition*, **2012**, 51, 1698-701	16.4	93
146	A sol□gel methodology for the preparation of lanthanide-oxide aerogels: preparation and characterization. *Journal of Sol-Gel Science and Technology*, **2012**, 64, 381-389	2.3	26
145	Novel catalytic gas sensors based on functionalized nanoparticle layers. *Sensors and Actuators B: Chemical*, **2012**, 174, 145-152	8.5	15
144	Toward Controlled Modification of Nanoporous Gold. A Detailed Surface Science Study on Cleaning and Oxidation. *Journal of Physical Chemistry C*, **2012**, 116, 4564-4571	3.8	48
143	Nanoporous Gold as a Platform for a Building Block Catalyst. *ACS Catalysis*, **2012**, 2, 2199-2215	13.1	93
142	Stoichiometry□tructure correlation of epitaxial Ce1□PrxO2□(x=0□) thin films on Si(111). *Journal of Crystal Growth*, **2012**, 355, 159-165	1.6	11
141	Chapter 1:Introduction to Nanoporous Gold. *RSC Nanoscience and Nanotechnology*, **2012**, 1-10		5
140	CHAPTER 8:Surface Chemistry and Catalysis. *RSC Nanoscience and Nanotechnology*, **2012**, 167-198		5
139	Synthesis of stable AuAg bimetallic nanoparticles encapsulated by diblock copolymer micelles. *Nanoscale*, **2012**, 4, 1658-64	7.7	27
138	Sauerstoffinduzierte Kupplung und Oxidation von Alkoholen □er nanopor□em Gold. *Angewandte Chemie*, **2012**, 124, 1730-1733	3.6	12
137	Surface Functionalization of Iron Oxide Nanoparticles and their Stability in Different Media. *ChemPlusChem*, **2012**, 77, 576-583	2.8	14
136	Metal Support Interactions in Co3O4/Al2O3 Catalysts Prepared from w/o Microemulsions. *Catalysis Letters*, **2012**, 142, 830-837	2.8	22
135	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	2.4	13
134	Stacking behavior of twin-free type-B oriented CeO2(111) films on hexagonal Pr2O3(0001)/Si(111) systems. *Physical Review B*, **2012**, 85,	3.3	11

133	Nanoporous gold: a new gold catalyst with tunable properties. *Faraday Discussions*, **2011**, 152, 87-98; discussion 99-120	3.6	66
132	Supported colloidal nanoparticles in heterogeneous gas phase catalysis: on the way to tailored catalysts. *Physical Chemistry Chemical Physics*, **2011**, 13, 19270-84	3.6	68
131	Silver residues as a possible key to a remarkable oxidative catalytic activity of nanoporous gold. *Physical Chemistry Chemical Physics*, **2011**, 13, 4529-39	3.6	107
130	ALD functionalized nanoporous gold: thermal stability, mechanical properties, and catalytic activity. *Nano Letters*, **2011**, 11, 3085-90	11.5	190
129	Heterogeneous catalysis with supported platinum colloids: A systematic study of the interplay between support and functional ligands. *Journal of Catalysis*, **2011**, 278, 143-152	7.3	51
128	Colloidal synthesis and structural control of PtSn bimetallic nanoparticles. *Langmuir*, **2011**, 27, 11052-61	4	50
127	Kolloidchemisch hergestellte ligandenstabilisierte Nanopartikel □ ein Weg zur Beeinflussung starker Metall-Tr□ger-Wechselwirkungen in der heterogenen Gasphasenkatalyse. *Angewandte Chemie*, **2011**, 123, 3974-3978	3.6	6
126	Ligand capping of colloidally synthesized nanoparticles--a way to tune metal-support interactions in heterogeneous gas-phase catalysis. *Angewandte Chemie - International Edition*, **2011**, 50, 3888-91	16.4	62
125	Rational design of functional oxide thin films with embedded magnetic or plasmonic metallic nanoparticles. *Angewandte Chemie - International Edition*, **2011**, 50, 9957-60	16.4	23
124	Foam, fleece and honeycomb: catalytically active coatings from colloidally prepared nanoparticles. *Catalysis Science and Technology*, **2011**, 1, 830	5.5	6
123	Role of Palladium in Iron Based Fischer□Tropsch Catalysts Prepared by Flame Spray Pyrolysis□ *Journal of Physical Chemistry C*, **2011**, 115, 1302-1310	3.8	29
122	Modification of surface properties of thin polysaccharide films by low-energy electron exposure. *Carbohydrate Polymers*, **2011**, 83, 608-615	10.3	12
121	Photoemission study of praseodymia in its highest oxidation state: the necessity of in situ plasma treatment. *Journal of Chemical Physics*, **2011**, 134, 054701	3.9	25
120	Structure of oxygen-plasma-treated ultrathin praseodymia films on Si(111). *Physical Review B*, **2011**, 83,	3.3	7
119	Nanoporous gold: a new material for catalytic and sensor applications. *Physical Chemistry Chemical Physics*, **2010**, 12, 12919-30	3.6	261
118	Nanoporous gold catalysts for selective gas-phase oxidative coupling of methanol at low temperature. *Science*, **2010**, 327, 319-22	33.3	914
117	Effect of surface chemistry on the stability of gold nanostructures. *Langmuir*, **2010**, 26, 13736-40	4	38
116	Colloidally prepared Pt nanowires versus impregnated Pt nanoparticles: comparison of adsorption and reaction properties. *Langmuir*, **2010**, 26, 16330-8	4	20

115	Colloidal Nanoparticles Embedded in Ceramers: Toward Structurally Designed Catalysts. *Journal of Physical Chemistry C*, **2010**, 114, 14224-14232	3.8	25
114	Colloidally Prepared Pt Nanoparticles for Heterogeneous Gas-Phase Catalysis: Influence of Ligand Shell and Catalyst Loading on CO Oxidation Activity. *ChemCatChem*, **2010**, 2, 198-205	5.2	33
113	Nanostructured Praseodymium Oxide: Correlation Between Phase Transitions and Catalytic Activity. *ChemCatChem*, **2010**, 2, 694-704	5.2	22
112	Methodische Innovationen f□ die Chemielehre. *Chemkon - Chemie Konkret, Forum Fuer Unterricht Und Didaktik*, **2010**, 17, 124-130	0.3	
111	On revealing the vertical structure of nanoparticle films with elemental resolution: A total external reflection X-ray standing waves study. *Nuclear Instruments & Methods in Physics Research B*, **2010**, 268, 325-328	1.2	2
110	Chemistry of thin film formation and stability during praseodymium oxide deposition on Si(111) under oxygen-deficient conditions. *Surface Science*, **2010**, 604, 1287-1293	1.8	3
109	Growth of praseodymium oxide on Si(111) under oxygen-deficient conditions. *Physical Review B*, **2009**, 80,	3.3	14
108	Accumulation of iron oxide nanoparticles by cultured brain astrocytes. *Journal of Biomedical Nanotechnology*, **2009**, 5, 285-93	4	48
107	Surface Chemistry in Nanoscale Materials. *Materials*, **2009**, 2, 2404-2428	3.5	102
106	CVD of Conducting Ultrathin Copper Films. *Journal of the Electrochemical Society*, **2009**, 156, D452	3.9	12
105	Surface-chemistry-driven actuation in nanoporous gold. *Nature Materials*, **2009**, 8, 47-51	27	432
104	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	3.8	16
103	Nanoporous Au: An Unsupported Pure Gold Catalyst?. *Journal of Physical Chemistry C*, **2009**, 113, 5593-5600	3.8	205
102	Decomposition of methanol by Pd, Co, and bimetallic CoPd catalysts: A combined study of well-defined systems under ambient and UHV conditions. *Journal of Catalysis*, **2008**, 256, 24-36	7.3	27
101	Ultralow loading Pt nanocatalysts prepared by atomic layer deposition on carbon aerogels. *Nano Letters*, **2008**, 8, 2405-9	11.5	225
100	Nanostructured Praseodymium Oxide: Preparation, Structure, and Catalytic Properties. *Journal of Physical Chemistry C*, **2008**, 112, 3054-3063	3.8	74
99	Plasma modification of CoPt3 nanoparticle arrays: A route to catalytic coatings of surfaces. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2008**, 26, 908-912	2.9	4
98	UHV studies of methanol decomposition on mono- and bimetallic CoPd nanoparticles supported on thin alumina films. *ChemPhysChem*, **2008**, 9, 729-39	3.2	11

97	Ligand exchange with thiols: effects on composition and morphology of colloidal CoPt nanoparticles. *ChemPhysChem*, **2008**, 9, 821-5	3.2	6
96	Colloidally prepared nanoparticles for the synthesis of structurally well-defined and highly active heterogeneous catalysts. *Angewandte Chemie - International Edition*, **2008**, 47, 8946-9	16.4	26
95	Structural and Chemical Effects of Plasma Treatment on Close-Packed Colloidal Nanoparticle Layers. *Advanced Functional Materials*, **2008**, 18, 2398-2410	15.6	50
94	Kolloidchemisch präparierte Nanopartikel zur Herstellung wohldefinierter und hochaktiver Heterogenkatalysatoren. *Angewandte Chemie*, **2008**, 120, 9078-9082	3.6	6
93	Synthesis and Properties of Porous Hybrid Materials containing Metallic Nanoparticles. *Advanced Engineering Materials*, **2008**, 10, 241-245	3.5	46
92	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
91	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, 3541-58	3.6	87
90	Universal Phenomena of CO Adsorption on Gold Surfaces with Low-Coordinated Sites. *Journal of Physical Chemistry C*, **2007**, 111, 445-451	3.8	99
89	Ligand-capped Pt nanocrystals as oxide-supported catalysts: FTIR spectroscopic investigations of the adsorption and oxidation of CO. *Angewandte Chemie - International Edition*, **2007**, 46, 2923-6	16.4	47
88	Ligandenstabilisierte Pt-Nanokristalle als Katalysatoren auf einem Oxidträger: FT-IR-spektroskopische Untersuchungen zur Adsorption und Oxidation von CO. *Angewandte Chemie*, **2007**, 119, 2981-2984	3.6	7
87	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	7.3	46
86	New gold and silver-gold catalysts in the shape of sponges and sieves **2007**, 40, 142-149		40
85	Heteroepitaxial praseodymium sesquioxide films on Si(111): A new model catalyst system for praseodymium oxide based catalysts. *Surface Science*, **2007**, 601, 1473-1480	1.8	24
84	Gold catalysts: nanoporous gold foams. *Angewandte Chemie - International Edition*, **2006**, 45, 8241-4	16.4	423
83	On the role of oxygen in stabilizing low-coordinated Au atoms. *ChemPhysChem*, **2006**, 7, 1906-8	3.2	35
82	Goldkatalysatoren: Nanoporöse Gold-Schwämme. *Angewandte Chemie*, **2006**, 118, 8421-8425	3.6	38
81	Design of a UHV-compatible rf plasma source and its application to self-assembled layers of CoPt3 nanoparticles. *Review of Scientific Instruments*, **2006**, 77, 083902	1.7	9
80	Homogeneous Si films on CaF2/Si(1 1 1) due to boron enhanced solid phase epitaxy. *Surface Science* , **2006**, 600, 3637-3641	1.8	6

79	Au deposits on graphite: On the nature of high temperature desorption peaks in CO thermal desorption spectra. *Surface Science*, **2006**, 600, 3595-3599	1.8	8
78	The application of infrared spectroscopy to probe the surface morphology of alumina-supported palladium catalysts. *Journal of Chemical Physics*, **2005**, 123, 174706	3.9	231
77	Vibrational spectra of alumina- and silica-supported vanadia revisited: An experimental and theoretical model catalyst study. *Journal of Catalysis*, **2004**, 226, 88-100	7.3	223
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