Hans Niemantsverdriet

List of Publications by Year in Descending Order

345 papers	12,924 citations	58 h-index	95 g-index
385 ext. papers	14,008 ext. citations	5.1 avg, IF	6.44 L-index

#	Paper	IF	Citations
345	Structure-dependent adsorption and desorption of hydrogen on FCC and HCP cobalt surfaces. *Journal of Catalysis*, **2022**, 405, 303-312	7.3	4
344	Genesis of an Fe5C2@Fe3O4 core/shell structure during CO carburization of metallic iron nanoparticles. *Journal of Catalysis*, **2022**, 407, 97-103	7.3	2
343	Visualization of on-surface ethylene polymerization through ethylene insertion.. *Science*, **2022**, 375, 1188-1191	33.1	2
342	CO adsorption on Co(0001) revisited: High-coverage CO superstructures on the close-packed surface of cobalt. *Journal of Catalysis*, **2022**, 408, 142-154	7.3	1
341	Metal cocatalyst mediated photocatalytic dehydrogenative-condensation and direct condensation cross-coupling of aniline and alcohol. *Applied Catalysis B: Environmental*, **2022**, 309, 121264	21.8	3
340	Catalytic Role of Metal Nanoparticles in Selectivity Control over Photodehydrogenative Coupling of Primary Amines to Imines and Secondary Amines. *ACS Catalysis*, **2021**, 11, 6656-6661	13.1	12
339	Rationally Designed Metal Cocatalyst for Selective Photosynthesis of Bibenzyls via Dehalogenative C□□ Homocoupling. *ACS Catalysis*, **2021**, 11, 4338-4348	13.1	8
338	Inhibit the formation of toxic methylphenolic by-products in photo-decomposition of formaldehyde□toluene/xylene mixtures by Pd cocatalyst on TiO2. *Applied Catalysis B: Environmental*, **2021**, 291, 120118	21.8	10
337	Optimized CO Capture of the Zeolitic Imidazolate Framework ZIF-8 Modified by Solvent-Assisted Ligand Exchange. *ACS Omega*, **2021**, 6, 21850-21860	3.9	3
336	Role of Interfaces in the Thermal Reduction Process of the FeO/Cu2O/Cu(100) Surface. *Journal of Physical Chemistry C*, **2021**, 125, 20863-20869	3.8	1
335	Novel microreactor and generic model catalyst platform for the study of fast temperature pulsed operation □CO oxidation rate enhancement on Pt. *Chemical Engineering Journal*, **2021**, 425, 131559	14.7	2
334	Carbon monoxide adsorption on cobalt overlayers on a Si(1 1 1) surface studied by STM and XPS. *Applied Surface Science*, **2021**, 569, 151045	6.7	0
333	FeP Nanocatalyst with Preferential [010] Orientation Boosts the Hydrogen Evolution Reaction in Polymer-Electrolyte Membrane Electrolyzer. *Energy & Fuels*, **2020**, 34, 6423-6429	4.1	12
332	Mechanistic insight into carbon-carbon bond formation on cobalt under simulated Fischer-Tropsch synthesis conditions. *Nature Communications*, **2020**, 11, 750	17.4	26
331	Relevance of Chemical vs. Electrochemical Oxidation of Tunable Carbene Iridium Complexes for Catalytic Water Oxidation. *European Journal of Inorganic Chemistry*, **2020**, 2020, 801-812	2.3	12
330	Reactivity of C3Hx Adsorbates in Presence of Co-adsorbed CO and Hydrogen: Testing Fischer□ropsch Chain Growth Mechanisms. *Topics in Catalysis*, **2020**, 63, 1412-1423	2.3	1
329	Enhanced Oxygenates Formation in the Fischer□ropsch Synthesis over Co- and/or Ni-Containing Fe Alloys: Characterization and 2D Gas Chromatographic Product Analysis. *ACS Catalysis*, **2020**, 10, 14661-14677	13.1	3

328	Effect of Pd and Au on Hydrogen Abstraction and C C Cleavage in Photoconversion of Glycerol: Beyond Charge Separation. *Journal of Physical Chemistry C*, **2020**, 124, 20320-20327	3.8	1
327	Interaction of hydrogen with flat (0001) and corrugated (11 20) and (10 12) cobalt surfaces: Insights from experiment and theory. *Catalysis Today*, **2020**, 342, 124-130	5.3	14
326	Sintering of cobalt during FTS: Insights from industrial and model systems. *Catalysis Today*, **2020**, 342, 59-70	5.3	11
325	Boosting Photocatalytic Hydrogen Production by Modulating Recombination Modes and Proton Adsorption Energy. *Journal of Physical Chemistry Letters*, **2019**, 10, 5381-5386	6.4	8
324	Effect of ammonia on cobalt Fischer Tropsch synthesis catalysts: a surface science approach. *Catalysis Science and Technology*, **2019**, 9, 702-710	5.5	4
323	Overpotential analysis of alkaline and acidic alcohol electrolysers and optimized membrane-electrode assemblies. *International Journal of Hydrogen Energy*, **2019**, 44, 10163-10173	6.7	3
322	NiP2: A Story of Two Divergent Polymorphic Multifunctional Materials. *Chemistry of Materials*, **2019** , 31, 3407-3418	9.6	35
321	Solid Base Bi O Br (OH) with Active Lattice Oxygen for the Efficient Photo-Oxidation of Primary Alcohols to Aldehydes. *Angewandte Chemie - International Edition*, **2019**, 58, 6265-6270	16.4	47
320	Promotion Mechanisms of Au Supported on TiO2 in Thermal- and Photocatalytic Glycerol Conversion. *Journal of Physical Chemistry C*, **2019**, 123, 19734-19741	3.8	9
319	Synthesis, Spectroscopy and Electrochemistry in Relation to DFT Computed Energies of Ferrocene- and Ruthenocene-Containing -Diketonato Iridium(III) Heteroleptic Complexes. Structure of [(2-Pyridylphenyl)Ir(RcCOCHCOCH]. *Molecules*, **2019**, 24,	4.8	5
318	Relationship between Iron Carbide Phases (Fe2C, Fe7C3, and Fe5C2) and Catalytic Performances of Fe/SiO2 Fischer Tropsch Catalysts. *ACS Catalysis*, **2018**, 8, 3304-3316	13.1	116
317	Orbital Physics of Perovskites for the Oxygen Evolution Reaction. *Topics in Catalysis*, **2018**, 61, 267-275	2.3	16
316	Preferential oxidation of CO in H2 on Cu and Cu/CeOx catalysts studied by in situ UV Vis and mass spectrometry and DFT. *Journal of Catalysis*, **2018**, 357, 176-187	7.3	21
315	Light-tuned selective photosynthesis of azo- and azoxy-aromatics using graphitic CN. *Nature Communications*, **2018**, 9, 60	17.4	101
314	In-situ probing photocatalytic C C bond cleavage in ethylene glycol under ambient conditions and the effect of metal cocatalyst. *Journal of Catalysis*, **2018**, 365, 313-319	7.3	8
313	Application of work function measurements in the study of surface catalyzed reactions on Rh(1 0 0) **2018**, 4, 1-11		3
312	Enhanced CO2 adsorption in nano-ZIF-8 modified by solvent assisted ligand exchange. *Microporous and Mesoporous Materials*, **2018**, 262, 98-105	5.3	30
311	Intercalation Mechanisms of Fe Atoms underneath A Graphene Monolayer on Ru(0001). *Journal of Physical Chemistry C*, **2018**, 122, 22903-22910	3.8	5

310	CO as a Promoting Spectator Species of CxHy Conversions Relevant for Fischer–Tropsch Chain Growth on Cobalt: Evidence from Temperature-Programmed Reaction and Reflection Absorption Infrared Spectroscopy. *ACS Catalysis*, **2018**, 8, 10826-10835	13.1	11
309	Efficient Solar-Driven Hydrogen Transfer by Bismuth-Based Photocatalyst with Engineered Basic Sites. *Journal of the American Chemical Society*, **2018**, 140, 16711-16719	16.4	35
308	Can Electrochemical Measurements Be Used To Predict X-ray Photoelectron Spectroscopic Data? The Case of Ferrocenyl-β-Diketonato Complexes of Manganese(III). *Inorganic Chemistry*, **2018**, 57, 6606-6616	5.1	8
307	Iron Carbidization on Thin-Film Silica and Silicon: A Near-Ambient-Pressure X-ray Photoelectron Spectroscopy and Scanning Tunneling Microscopy Study. *ACS Catalysis*, **2018**, 8, 7326-7333	13.1	15
306	Activation pathways taking place at molecular copper precatalysts for the oxygen evolution reaction. *Catalysis Today*, **2017**, 290, 33-38	5.3	16
305	Ligand effects in rhodium-catalyzed hydroformylation with bisphosphines: steric or electronic?. *Catalysis Science and Technology*, **2017**, 7, 1404-1414	5.5	36
304	SiO2-supported Fe & FeMn colloids–Fischer-Tropsch synthesis on 3D model catalysts. *Applied Catalysis A: General*, **2017**, 537, 83-92	5.1	7
303	Catalysis for Fuels: general discussion. *Faraday Discussions*, **2017**, 197, 165-205	3.6	4
302	Designing new catalysts for synthetic fuels: general discussion. *Faraday Discussions*, **2017**, 197, 353-388	3.6	6
301	Analysis of the Magnetic Entropy in Oxygen Reduction Reactions Catalysed by Manganite Perovskites. *ChemCatChem*, **2017**, 9, 3358-3363	5.2	15
300	Environmental Transmission Electron Microscopy (ETEM) Studies of Single Iron Nanoparticle Carburization in Synthesis Gas. *ACS Catalysis*, **2017**, 7, 4867-4875	13.1	40
299	Hydrogen from electrochemical reforming of C1–3 alcohols using proton conducting membranes. *International Journal of Hydrogen Energy*, **2017**, 42, 10762-10774	6.7	29
298	Heterogeneous Catalysis **2017**, 15-71		
297	Cobalt and cobalt carbide on alumina/NiAl(110) as model catalysts. *Catalysis Science and Technology* , **2017**, 7, 5893-5899	5.5	25
296	Effect of Aldehyde and Carboxyl Functionalities on the Surface Chemistry of Biomass-Derived Molecules. *Langmuir*, **2017**, 33, 11919-11929	4	5
295	Activation and Deactivation of Gold/Ceria-Zirconia in the Low-Temperature Water-Gas Shift Reaction. *Angewandte Chemie - International Edition*, **2017**, 56, 16037-16041	16.4	36
294	Photosystem II Acts as a Spin-Controlled Electron Gate during Oxygen Formation and Evolution. *Journal of the American Chemical Society*, **2017**, 139, 16604-16608	16.4	30
293	Photocatalytic C C bond cleavage in ethylene glycol on TiO2: A molecular level picture and the effect of metal nanoparticles. *Journal of Catalysis*, **2017**, 354, 37-45	7.3	12

292	Understanding FTS selectivity: the crucial role of surface hydrogen. *Faraday Discussions*, **2017**, 197, 101-116	3.6	16
291	Electrocatalysts for the generation of hydrogen, oxygen and synthesis gas. *Progress in Energy and Combustion Science*, **2017**, 58, 1-35	33.6	311
290	Scientific Leadership **2017**,		2
289	Layered Antiferromagnetic Ordering in the Most Active Perovskite Catalysts for the Oxygen Evolution Reaction. *ChemCatChem*, **2016**, 8, 2968-2974	5.2	39
288	Modeling the surface chemistry of biomass model compounds on oxygen-covered Rh(100). *Physical Chemistry Chemical Physics*, **2016**, 18, 23888-903	3.6	8
287	Role of ZnO and CeOx in Cu-Based Model Catalysts in Activation of H2O and CO2 Dynamics Studied by in Situ Ultraviolet□Visible and X-ray Photoelectron Spectroscopy. *ACS Catalysis*, **2016**, 6, 7994-8003	13.1	28
286	Oxygen Evolution Reaction on Perovskite Electrocatalysts with Localized Spins and Orbital Rotation Symmetry. *ChemCatChem*, **2016**, 8, 3762-3768	5.2	24
285	Reflections on the Fischer-Tropsch synthesis: Mechanistic issues from a surface science perspective. *Catalysis Today*, **2016**, 275, 100-110	5.3	35
284	Mechanistic Insight into the Interaction Between a Titanium Dioxide Photocatalyst and Pd Cocatalyst for Improved Photocatalytic Performance. *ACS Catalysis*, **2016**, 6, 4239-4247	13.1	41
283	Elementary steps in Fischer□ropsch synthesis: CO bond scission, CO oxidation and surface carbiding on Co(0001). *Surface Science*, **2016**, 648, 60-66	1.8	64
282	Cu Model Catalyst Dynamics and CO Oxidation Kinetics Studied by Simultaneous in Situ UV□is and Mass Spectroscopy. *ACS Catalysis*, **2016**, 6, 2867-2876	13.1	32
281	Early stages of catalyst aging in the iridium mediated water oxidation reaction. *Physical Chemistry Chemical Physics*, **2016**, 18, 10931-40	3.6	14
280	Consequences of Electron-Density Manipulations on the X-ray Photoelectron Spectroscopic Properties of Ferrocenyl-□diketonato Complexes of Manganese(III). Structure of [Mn(FcCOCHCOCH3)3]. *Inorganic Chemistry*, **2016**, 55, 1992-2000	5.1	20
279	The role of carboxylic acid in cobalt Fischer-Tropsch synthesis catalyst deactivation. *Catalysis Today*, **2016**, 275, 127-134	5.3	11
278	Hydrogen spillover in the Fischer□ropsch synthesis: An analysis of platinum as a promoter for cobalt□lumina catalysts. *Catalysis Today*, **2016**, 261, 17-27	5.3	66
277	Properties of Manganese(III) Ferrocenyl-□Diketonato Complexes Revealed by Charge Transfer and Multiplet Splitting in the Mn 2p and Fe 2p X-Ray Photoelectron Envelopes. *Molecules*, **2016**, 21,	4.8	20
276	Adsorption and Decomposition of Ethene and Propene on Co(0001): The Surface Chemistry of Fischer□ropsch Chain Growth Intermediates. *Journal of Physical Chemistry C*, **2016**, 120, 29210-29224	3.8	19
275	Ammonia Adsorption and Decomposition on Co(0001) in Relation to Fischer□ropsch Synthesis. *Journal of Physical Chemistry C*, **2016**, 120, 3834-3845	3.8	14

274	Oxygen Adsorption and Water Formation on Co(0001). *Journal of Physical Chemistry C*, **2016**, 120, 4833-4842	4.8	35
273	Providing Fundamental and Applied Insights into Fischer–Tropsch Catalysis: Sasol–Eindhoven University of Technology Collaboration. *ACS Catalysis*, **2016**, 6, 3840-3855	13.1	32
272	The effect of C-OH functionality on the surface chemistry of biomass-derived molecules: ethanol chemistry on Rh(100). *Physical Chemistry Chemical Physics*, **2016**, 18, 30117-30127	3.6	8
271	Detangling Catalyst Modification Reactions from the Oxygen Evolution Reaction by Online Mass Spectrometry. *ACS Catalysis*, **2016**, 6, 7872-7875	13.1	13
270	Spectroscopic insights into cobalt-catalyzed Fischer-Tropsch synthesis: A review of the carbon monoxide interaction with single crystalline surfaces of cobalt. *Journal of Catalysis*, **2016**, 342, 1-16	7.3	64
269	Hydrogen spillover in the Fischer–Tropsch synthesis: An analysis of gold as a promoter for cobalt–alumina catalysts. *Catalysis Today*, **2016**, 275, 27-34	5.3	27
268	Modeling the Surface Chemistry of Sugars: Glycolaldehyde on Rhodium (100). *Journal of Physical Chemistry C*, **2015**, 119, 22915-22923	3.8	5
267	Relating adatom emission to improved durability of Pt–Pd diesel oxidation catalysts. *Journal of Catalysis*, **2015**, 328, 151-164	7.3	59
266	Methane, formaldehyde and methanol formation pathways from carbon monoxide and hydrogen on the (0 0 1) surface of the iron carbide χ-Fe5C2. *Journal of Catalysis*, **2015**, 325, 9-18	7.3	33
265	Ostwald ripening on a planar Co/SiO2 catalyst exposed to model Fischer–Tropsch synthesis conditions. *Journal of Catalysis*, **2015**, 328, 123-129	7.3	51
264	Stabilization of iron by manganese promoters in uniform bimetallic FeMn Fischer–Tropsch model catalysts prepared from colloidal nanoparticles **2015**, 1, 101-109		18
263	Reduction of Cu-Promoted Fe Model Catalysts Studied by In Situ Indirect Nanoplasmonic Sensing and X-ray Photoelectron Spectroscopy. *Journal of Physical Chemistry C*, **2015**, 119, 4085-4094	3.8	16
262	Monolayer Iron Carbide Films on Au(111) as a Fischer–Tropsch Model Catalyst. *ACS Catalysis*, **2014**, 4, 3255-3260	13.1	11
261	Elementary reactions of CO and H2 on C-terminated χ-Fe5C2(0 0 1) surfaces. *Journal of Catalysis*, **2014**, 317, 158-166	7.3	48
260	Transmission electron microscopy on early-stage tin oxide film morphology grown by atmospheric pressure chemical vapor deposition. *Applied Surface Science*, **2014**, 309, 263-270	6.7	2
259	Fundamental issues on practical Fischer–Tropsch catalysts: How surface science can help. *Catalysis Today*, **2014**, 228, 106-112	5.3	48
258	Chemical looping capabilities of olivine, used as a catalyst in indirect biomass gasification. *Applied Catalysis B: Environmental*, **2014**, 145, 216-222	21.8	38
257	Heterogeneous Catalysis: Introduction **2013**, 1-6		

256	Fischer–Tropsch Synthesis: Catalysts and Chemistry **2013**, 525-557		69
255	Promoter segregation in Pt and Ru promoted cobalt model catalysts during oxidation–reduction treatments. *Catalysis Today*, **2013**, 215, 2-7	5.3	17
254	Pulsed activation in heterogeneous catalysis. *Applied Thermal Engineering*, **2013**, 57, 180-187	5.8	11
253	Olivine as tar removal catalyst in biomass gasification: Catalyst dynamics under model conditions. *Applied Catalysis B: Environmental*, **2013**, 130-131, 168-177	21.8	49
252	Explicit Roles of Au and TiO2 in a Bifunctional Au/TiO2 Catalyst for the Water-Gas Shift Reaction: A DFT Study. *ChemCatChem*, **2013**, 5, 2479-2488	5.2	20
251	A comparison of cobalt and iron based slurry phase Fischer–Tropsch synthesis. *Catalysis Today*, **2013**, 215, 112-120	5.3	80
250	X-ray photoelectron spectroscopy study on the chemistry involved in tin oxide film growth during chemical vapor deposition processes. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2013**, 31, 01A105	2.9	7
249	First-principles elucidation of the surface chemistry of the C(2)H(x) (x = 0-6) adsorbate series on Fe(100). *Molecules*, **2013**, 18, 3806-24	4.8	20
248	Ab-initio calculations of the direct and hydrogen-assisted dissociation of CO on Fe(3 1 0). *Chemical Physics Letters*, **2012**, 534, 54-57	2.5	15
247	Highly dispersed platinum in metal organic framework NH2-MIL-101(Al) containing phosphotungstic acid – Characterization and catalytic performance. *Journal of Catalysis*, **2012**, 289, 42-52	7.3	133
246	Direct versus hydrogen-assisted CO dissociation on the Fe (100) surface: a DFT study. *ChemPhysChem*, **2012**, 13, 89-91	3.2	49
245	Energetic Driving Force of H Spillover between Rhodium and Titania Surfaces: A DFT View. *Journal of Physical Chemistry C*, **2012**, 116, 25362-25367	3.8	15
244	A new approach to silver-catalysed aerobic oxidation of octadecanol: Probing catalysts utilising a flat, two-dimensional silicon-based model support system. *Catalysis Communications*, **2012**, 27, 193-199	3.2	11
243	Atomic and Polymeric Carbon on Co(0001): Surface Reconstruction, Graphene Formation, and Catalyst Poisoning. *Journal of Physical Chemistry C*, **2012**, 116, 11575-11583	3.8	66
242	The Effect of Water on the Stability of Iron Oxide and Iron Carbide Nanoparticles in Hydrogen and Syngas Followed by in Situ X-ray Absorption Spectroscopy. *Journal of Physical Chemistry C*, **2012**, 116, 7367-7373	3.8	38
241	In situ ATR-FTIR studies on MgCl2-diisobutyl phthalate interactions in thin film Ziegler-Natta catalysts. *Langmuir*, **2012**, 28, 2643-51	4	39
240	Preparation and characterization of supported bimetallic Pd(IV)-Co(III) model catalyst from organometallic single source precursor for aerobic oxidation of alcohols. *Langmuir*, **2012**, 28, 16477-84	4	15
239	The surface chemistry of water on Fe(100): a density functional theory study. *ChemPhysChem*, **2012**, 13, 1583-90	3.2	30

238	A density functional theory study on the effect of zero-point energy corrections on the methanation profile on Fe(100). *ChemPhysChem*, **2012**, 13, 1591-6	3.2	42
237	5.4 Synthesis Gas to Hydrogen, Methanol, and Synthetic Fuels **2012**,		6
236	The beneficial effect of hydrogen on CO oxidation over Au catalysts. A computational study. *Molecules*, **2011**, 16, 9582-99	4.8	12
235	Two Gold Surfaces and a Cluster with Remarkable Reactivity for CO Oxidation, a Density Functional Theory Study. *Topics in Catalysis*, **2011**, 54, 415-423	2.3	14
234	Cobalt Fischer–Tropsch Catalyst Regeneration: The Crucial Role of the Kirkendall Effect for Cobalt Redispersion. *Topics in Catalysis*, **2011**, 54, 811-816	2.3	36
233	The impact of cobalt aluminate formation on the deactivation of cobalt-based Fischer–Tropsch synthesis catalysts. *Catalysis Today*, **2011**, 171, 192-200	5.3	65
232	Studying Fischer–Tropsch catalysts using transmission electron microscopy and model systems of nanoparticles on planar supports. *Catalysis Science and Technology*, **2011**, 1, 689	5.5	33
231	Transmission electron microscopy of transparent conductive oxide films made by atmospheric pressure chemical vapor deposition. *Applied Physics Letters*, **2011**, 98, 051907	3.4	5
230	Interaction and reaction of coadsorbed NO and CO on a Rh(100) single crystal surface. *Langmuir*, **2010**, 26, 16239-45	4	8
229	How Surface Reactivity Depends on the Configuration of Coadsorbed Reactants: CO Oxidation on Rh(100)□ *Journal of Physical Chemistry C*, **2010**, 114, 17127-17135	3.8	14
228	A Direct Relation between Adsorbate Interactions, Configurations, and Reactivity: CO Oxidation on Rh(100) and Rh(111). *Journal of Physical Chemistry C*, **2010**, 114, 21672-21680	3.8	14
227	Ethanol Decomposition on Co(0001): C□O Bond Scission on a Close-Packed Cobalt Surface. *Journal of Physical Chemistry Letters*, **2010**, 1, 1767-1770	6.4	48
226	Chemistry of O- and H-containing species on the (001) surface of anatase TiO2: a DFT study. *ChemPhysChem*, **2010**, 11, 2375-82	3.2	31
225	The Structure of Amorphous MoS3. *Bulletin Des Soci□s Chimiques Belges*, **2010**, 104, 299-299		2
224	Modelling the Sulfidation of Molybdenum Oxides: A Mechanistic Study. *Bulletin Des Soci□s Chimiques Belges*, **2010**, 104, 301-301		
223	Adsorption/desorption studies of CO on a rhodium(100) surface under UHV conditions: A comparative study using XPS, RAIRS, and SSIMS. *Catalysis Today*, **2010**, 154, 53-60	5.3	9
222	Fundamental understanding of deactivation and regeneration of cobalt Fischer–Tropsch synthesis catalysts. *Catalysis Today*, **2010**, 154, 271-282	5.3	259
221	Iron oxide nanoparticles on flat oxidic surfaces□ntroducing a new model catalyst for Fischer–Tropsch catalysis. *Catalysis Today*, **2010**, 154, 142-148	5.3	36

220	Chemistry of ethylene glycol on a Rh(100) single-crystal surface. *ChemSusChem*, **2009**, 2, 883-6	8.3	19
219	Pt nanoparticles inside the mesopores of TiO2 MCM-48: synthesis, characterization and catalytic activity for CO oxidation. *Journal of Materials Science*, **2009**, 44, 6701-6709	4.3	11
218	Investigation of Planar Ziegler-Natta Model Catalysts Using Attenuated Total Reflection Infrared Spectroscopy. *Catalysis Letters*, **2009**, 130, 278-285	2.8	21
217	Mars-van Krevelen-like Mechanism of CO Hydrogenation on an Iron Carbide Surface. *Catalysis Letters*, **2009**, 133, 257-261	2.8	96
216	Surface science models of industrial catalysts. *Surface Science*, **2009**, 603, 1756-1762	1.8	26
215	DFT study of CO and NO adsorption on low index and stepped surfaces of gold. *Surface Science*, **2009**, 603, 2734-2741	1.8	68
214	Au/TiO2 catalysts encapsulated in the mesopores of siliceous MCM-48 Reproducible synthesis, structural characterization and activity for CO oxidation. *Microporous and Mesoporous Materials*, **2009**, 118, 52-60	5.3	20
213	Carbon deposition as a deactivation mechanism of cobalt-based Fischer ropsch synthesis catalysts under realistic conditions. *Applied Catalysis A: General*, **2009**, 354, 102-110	5.1	176
212	Is there a correlation between catalyst particle size and CNT diameter?. *Carbon*, **2009**, 47, 2002-2013	10.4	40
211	Influence of Nitrogen Atoms on the Adsorption of CO on a Rh(100) Single Crystal Surface. *Journal of Physical Chemistry C*, **2009**, 113, 12277-12285	3.8	9
210	Adsorption and Dissociation of CO on Body-Centered Cubic Transition Metals and Alloys: Effect of Coverage and Scaling Relations. *Journal of Physical Chemistry C*, **2009**, 113, 11041-11049	3.8	30
209	Interactions between co-adsorbed CO and H on a Rh(100) single crystal surface. *Physical Chemistry Chemical Physics*, **2009**, 11, 10009-16	3.6	19
208	Synthesis of Well-defined Iron Nanoparticles on a Spherical Model Support **2009**,		1
207	The role of electron donors on lateral surfaces of MgCl2-supported Ziegler Natta catalysts: Observation by AFM and SEM. *Journal of Catalysis*, **2008**, 257, 81-86	7.3	97
206	Spectral reconstruction of surface adsorbed species using band-target entropy minimization. Application to CO and NO reaction over a Pt/gamma-Al2O3 catalyst using in situ DRIFT spectroscopy. *Physical Chemistry Chemical Physics*, **2008**, 10, 3535-47	3.6	9
205	Pure component spectral analysis of surface adsorbed species measured under real conditions. BTEM-DRIFTS study of CO and NO reaction over a Pd/gamma-Al2O3 catalyst. *Physical Chemistry Chemical Physics*, **2008**, 10, 5510-20	3.6	19
204	Adsorption, Desorption, and Dissociation of CO on Tungsten(100), a DFT Study. *Journal of Physical Chemistry C*, **2008**, 112, 7436-7444	3.8	10
203	Superhydrophobic Polyethylene Films by Catalytic Ethylene Polymerization. *Journal of Adhesion Science and Technology*, **2008**, 22, 353-363	2	4

202	Gamma Spectroscopy **2008**, 895		
201	Vibrational Stark tuning rates from periodic DFT calculations: CO/Pt(111). *Electrochimica Acta*, **2008**, 53, 2897-2906	6.7	12
200	Density Functional Theory Study of CO Adsorption and Dissociation on Molybdenum(100). *Journal of Physical Chemistry C*, **2007**, 111, 13473-13480	3.8	14
199	Reactivity of Cr Species Grafted on SiO2/Si(100) Surface: A Reflection Extended X-ray Absorption Fine Structure Study down to the Submonolayer Regime. *Journal of Physical Chemistry C*, **2007**, 111, 16437-16444	3.8	22
198	Quantification of Liquid Crystal Concentrations in Periodically Stratified Polymer-Dispersed Liquid Crystal Films by Dynamic Secondary Ion Mass Spectrometry and Multivariate Statistical Analysis. *Journal of Physical Chemistry C*, **2007**, 111, 10965-10971	3.8	7
197	A Preparation Method for Well-Defined Crystallites of Mgcl2-Supported Ziegler-Natta Catalysts and their Observation by AFM and SEM. *Macromolecular Rapid Communications*, **2007**, 28, 1466-1471	4.8	39
196	On the H-exchange of ammonia and silica hydroxyls in the presence of Rh nanoparticles. *Applied Surface Science*, **2007**, 253, 3600-3607	6.7	5
195	Cobalt Fischer-Tropsch synthesis: Deactivation by oxidation?. *Catalysis Today*, **2007**, 123, 293-302	5.3	165
194	Insight into the formation of the active phases in supported NiW hydrotreating catalysts. *Applied Catalysis A: General*, **2007**, 322, 16-32	5.1	76
193	A density functional theory study of HCN hydrogenation to methylamine on Ni(111). *Journal of Catalysis*, **2007**, 245, 436-445	7.3	26
192	Introducing a new surface science model for Ziegler□Natta catalysts: Preparation, basic characterization and testing. *Journal of Catalysis*, **2007**, 247, 129-136	7.3	51
191	A density functional theory study of HCN hydrogenation to methylamine on Co(111). *Journal of Catalysis*, **2007**, 248, 38-45	7.3	22
190	Visualization of local ethylene polymerization activity on a flat CrO x /SiO2/Si(100) model catalyst. *Topics in Catalysis*, **2007**, 46, 239-245	2.3	13
189	A Flat Model Approach to Ziegler-Natta Catalysts for Propylene Polymerization and a Preparation Method of Well-defined Crystallites of MgCl2-supported Catalysts. *Macromolecular Symposia*, **2007**, 260, 140-146	0.8	18
188	A Flat Model Approach to Tethered Bis(imino)pyridyl Iron Ethylene Polymerization Catalysts. *Macromolecular Symposia*, **2007**, 260, 147-153	0.8	4
187	**2007**,		106
186	XANES study of the susceptibility of nano-sized cobalt crystallites to oxidation during realistic Fischer□Tropsch synthesis. *Applied Catalysis A: General*, **2006**, 312, 12-19	5.1	114
185	Preparation and characterisation of spherical Co/SiO2 model catalysts with well-defined nano-sized cobalt crystallites and a comparison of their stability against oxidation with water. *Journal of Catalysis*, **2006**, 239, 326-339	7.3	92

184	The effect of temperature on ethylene polymerization over flat Phillips model catalysts. *Journal of Catalysis*, **2006**, 240, 39-46	7.3	26
183	Migration of carbon into subsurface layers of Rh(100): a DFT study. *ChemPhysChem*, **2006**, 7, 1022-5	3.2	10
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