

# Jiří Libuda

## List of Publications by Year in descending order

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276  
papers

12,563  
citations

20817

60  
h-index

36028

97  
g-index

289  
all docs

289  
docs citations

289  
times ranked

9168  
citing authors

#	ARTICLE	IF	CITATIONS
1	Support nanostructure boosts oxygen transfer to catalytically active platinum nanoparticles. <i>Nature Materials</i> , 2011, 10, 310-315.	27.5	748
2	Counting electrons on supported nanoparticles. <i>Nature Materials</i> , 2016, 15, 284-288.	27.5	469
3	Maximum Noble-Metal Efficiency in Catalytic Materials: Atomically Dispersed Surface Platinum. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 10525-10530.	13.8	384
4	Molecular beam experiments on model catalysts. <i>Surface Science Reports</i> , 2005, 57, 157-298.	7.2	327
5	Structure and defects of an ordered alumina film on NiAl(110). <i>Surface Science</i> , 1994, 318, 61-73.	1.9	311
6	CO Adsorption on Pd Nanoparticles: Density Functional and Vibrational Spectroscopy Studies. <i>Journal of Physical Chemistry B</i> , 2003, 107, 255-264.	2.6	262
7	Surface Science and Model Catalysis with Ionic Liquid-Modified Materials. <i>Advanced Materials</i> , 2011, 23, 2571-2587.	21.0	181
8	Catalytic Activity and Poisoning of Specific Sites on Supported Metal Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2002, 41, 2532-2535.	13.8	170
9	Hydroxyl driven reconstruction of the polar NiO(111) surface. <i>Surface Science</i> , 1994, 315, L977-L982.	1.9	163
10	Fluctuations and Bistabilities on Catalyst Nanoparticles. <i>Science</i> , 2004, 304, 1639-1644.	12.6	156
11	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.	6.2	155
12	Size-Dependent Oxidation Mechanism of Supported Pd Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 3693-3697.	13.8	140
13	Title is missing!. <i>Topics in Catalysis</i> , 2001, 15, 201-209.	2.8	129
14	Methane Activation by Platinum: Critical Role of Edge and Corner Sites of Metal Nanoparticles. <i>Chemistry - A European Journal</i> , 2010, 16, 6530-6539.	3.3	126
15	Interaction of rhodium with hydroxylated alumina model substrates. <i>Surface Science</i> , 1997, 384, 106-119.	1.9	119
16	Toward Ionic-Liquid-Based Model Catalysis: Growth, Orientation, Conformation, and Interaction Mechanism of the [Tf <sub>2</sub> N] <sup>-</sup> Anion in [BMIM][Tf <sub>2</sub> N] Thin Films on a Well-Ordered Alumina Surface. <i>Langmuir</i> , 2010, 26, 7199-7207.	3.5	116
17	Oxygen Storage at the Metal/Oxide Interface of Catalyst Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 7601-7605.	13.8	115
18	Ceria reoxidation by CO <sub>2</sub> : A model study. <i>Journal of Catalysis</i> , 2010, 275, 181-185.	6.2	115

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19	Interaction of oxygen with palladium deposited on a thin alumina film. <i>Surface Science</i> , 2002, 501, 270-281.	1.9	111
20	Surface Reactivity of Pd Nanoparticles Supported on Polycrystalline Substrates As Compared to Thin Film Model Catalysts: An Infrared Study of CO Adsorption. <i>Journal of Physical Chemistry B</i> , 2004, 108, 3603-3613.	2.6	110
21	Water Chemistry on Model Ceria and Pt/Ceria Catalysts. <i>Journal of Physical Chemistry C</i> , 2012, 116, 12103-12113.	3.1	108
22	Model Catalytic Studies of Liquid Organic Hydrogen Carriers: Dehydrogenation and Decomposition Mechanisms of Dodecahydro- <i>N</i> -ethylcarbazole on Pt(111). <i>ACS Catalysis</i> , 2014, 4, 657-665.	11.2	106
23	Near ambient pressure XPS investigation of the interaction of ethanol with Co/CeO <sub>2</sub> (111). <i>Journal of Catalysis</i> , 2013, 307, 132-139.	6.2	105
24	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, 3541-3558.	2.8	100
25	Epitaxial Cubic Ce <sub>2</sub> O <sub>3</sub> Films via Ce-CeO <sub>2</sub> Interfacial Reaction. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 866-871.	4.6	99
26	Atomically Dispersed Pd, Ni, and Pt Species in Ceria-Based Catalysts: Principal Differences in Stability and Reactivity. <i>Journal of Physical Chemistry C</i> , 2016, 120, 9852-9862.	3.1	99
27	Isomerization and Hydrogenation of <i>cis</i> -2-Butene on Pd Model Catalyst. <i>Journal of Physical Chemistry C</i> , 2008, 112, 11408-11420.	3.1	94
28	A molecular beam/surface spectroscopy apparatus for the study of reactions on complex model catalysts. <i>Review of Scientific Instruments</i> , 2000, 71, 4395.	1.3	93
29	Ligand Effects in SCILL Model Systems: Site-Specific Interactions with Pt and Pd Nanoparticles. <i>Advanced Materials</i> , 2011, 23, 2617-2621.	21.0	91
30	Effects of deposited Pt particles on the reducibility of CeO <sub>2</sub> (111). <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 11384.	2.8	89
31	Dehydrogenation of Dodecahydro- <i>N</i> -ethylcarbazole on Pd/Al <sub>2</sub> O <sub>3</sub> Model Catalysts. <i>Chemistry - A European Journal</i> , 2011, 17, 11542-11552.	3.3	89
32	Electrifying model catalysts for understanding electrocatalytic reactions in liquid electrolytes. <i>Nature Materials</i> , 2018, 17, 592-598.	27.5	89
33	Adsorption sites, metal-support interactions, and oxygen spillover identified by vibrational spectroscopy of adsorbed CO: A model study on Pt/ceria catalysts. <i>Journal of Catalysis</i> , 2012, 289, 118-126.	6.2	88
34	The CO oxidation kinetics on supported Pd model catalysts: A molecular beam/in situ time-resolved infrared reflection absorption spectroscopy study. <i>Journal of Chemical Physics</i> , 2001, 114, 4669.	3.0	87
35	Storing energy with molecular photoisomers. <i>Joule</i> , 2021, 5, 3116-3136.	24.0	86
36	The interaction of oxygen with alumina-supported palladium particles. <i>Catalysis Letters</i> , 2001, 71, 5-13.	2.6	85

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37	Oxide-based nanomaterials for fuel cell catalysis: the interplay between supported single Pt atoms and particles. <i>Catalysis Science and Technology</i> , 2017, 7, 4315-4345.	4.1	84
38	Boosting the activity of hydrogen release from liquid organic hydrogen carrier systems by sulfur-additives to Pt on alumina catalysts. <i>Catalysis Science and Technology</i> , 2019, 9, 3537-3547.	4.1	84
39	The Growth and Properties of Pd and Pt on Al <sub>2</sub> O <sub>3</sub> /NiAl(110). <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1995, 99, 1381-1386.	0.9	83
40	Metal-oxide interaction for metal clusters on a metal-supported thin alumina film. <i>Surface Science</i> , 1999, 442, L964-L970.	1.9	83
41	On the thermal stability of metal particles supported on a thin alumina film. <i>Surface Science</i> , 2003, 523, 103-110.	1.9	83
42	Operando DRIFTS and DFT Study of Propane Dehydrogenation over Solid- and Liquid-Supported Ga <sub>x</sub> Pt <sub>y</sub> Catalysts. <i>ACS Catalysis</i> , 2019, 9, 2842-2853.	11.2	83
43	Particle size dependent CO dissociation on alumina-supported Rh: a model study. <i>Chemical Physics Letters</i> , 1997, 279, 92-99.	2.6	80
44	Particle size dependent adsorption and reaction kinetics on reduced and partially oxidized Pd nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 1347.	2.8	79
45	Dehydrogenation Mechanism of Liquid Organic Hydrogen Carriers: Dodecahydro- <i>N</i> -ethylcarbazole on Pd(111). <i>Chemistry - A European Journal</i> , 2013, 19, 10854-10865.	3.3	79
46	The influence of OH groups on the growth of rhodium on alumina: a model study. <i>Catalysis Letters</i> , 2000, 68, 19-24.	2.6	77
47	Ionic liquid based model catalysis: interaction of [BMIM][Tf <sub>2</sub> N] with Pd nanoparticles supported on an ordered alumina film. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 10610.	2.8	77
48	KOH-promoted Pt/Al <sub>2</sub> O <sub>3</sub> catalysts for water gas shift and methanol steam reforming: An operando DRIFTS-MS study. <i>Applied Catalysis B: Environmental</i> , 2017, 201, 169-181.	20.2	77
49	Highly Effective Propane Dehydrogenation Using Ga-Rh Supported Catalytically Active Liquid Metal Solutions. <i>ACS Catalysis</i> , 2019, 9, 9499-9507.	11.2	76
50	CO oxidation on partially oxidized Pd nanoparticles. <i>Journal of Catalysis</i> , 2006, 242, 58-70.	6.2	73
51	Dehydrogenation of Dodecahydro- <i>N</i> -ethylcarbazole on Pt(111). <i>ChemSusChem</i> , 2013, 6, 974-977.	6.8	73
52	Towards an efficient liquid organic hydrogen carrier fuel cell concept. <i>Energy and Environmental Science</i> , 2019, 12, 2305-2314.	30.8	73
53	Adsorption and Activation of CO on Co <sub>3</sub> O <sub>4</sub> (111) Thin Films. <i>Journal of Physical Chemistry C</i> , 2015, 119, 16688-16699.	3.1	72
54	Oxygen-induced Restructuring of a Pd/Fe <sub>3</sub> O <sub>4</sub> Model Catalyst. <i>Catalysis Letters</i> , 2006, 107, 189-196.	2.6	70

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55	Reaction Kinetics on Heterogeneous Model Catalysts. <i>Journal of Catalysis</i> , 2001, 204, 378-392.	6.2	69
56	Size and Structure Effects Controlling the Stability of the Liquid Organic Hydrogen Carrier Dodecahydro- <i>N</i> -ethylcarbazole during Dehydrogenation over Pt Model Catalysts. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 1498-1504.	4.6	69
57	Adsorption on oxide surfaces: structure and dynamics. <i>Surface Science</i> , 1994, 307-309, 1148-1160.	1.9	68
58	A route to continuous ultra-thin cerium oxide films on Cu(1 1 1). <i>Surface Science</i> , 2009, 603, 3382-3388.	1.9	67
59	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.	2.1	63
60	Infrared study of CO adsorption on alumina supported palladium particles. <i>Surface Science</i> , 1998, 402-404, 428-432.	1.9	62
61	SO <sub>2</sub> Adsorption on Pt(111) and Oxygen Precovered Pt(111): A Combined Infrared Reflection Absorption Spectroscopy and Density Functional Study. <i>Journal of Physical Chemistry C</i> , 2011, 115, 479-491.	3.1	61
62	Reactivity of atomically dispersed Pt <sup>2+</sup> species towards H <sub>2</sub> : model Pt/CeO <sub>2</sub> fuel cell catalyst. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 7672-7679.	2.8	61
63	Adsorption, decomposition and oxidation of methanol on alumina supported palladium particles. <i>Physical Chemistry Chemical Physics</i> , 2002, 4, 3909-3918.	2.8	60
64	A Molecular Beam Study of the NO + CO Reaction on Pd(111) Surfaces. <i>Journal of Physical Chemistry B</i> , 2005, 109, 13272-13282.	2.6	60
65	Adsorption and reaction of NO <sub>2</sub> on ordered alumina films and mixed baria alumina nanoparticles: Cooperative versus non-cooperative reaction mechanisms. <i>Journal of Catalysis</i> , 2008, 260, 315-328.	6.2	60
66	CO dissociation characteristics on size-distributed rhodium islands on alumina model substrates. <i>Journal of Chemical Physics</i> , 1998, 108, 2967-2974.	3.0	58
67	Complex model catalysts under UHV and high pressure conditions: CO adsorption and oxidation on alumina-supported Pd particles. <i>Journal of Molecular Catalysis A</i> , 2000, 162, 51-66.	4.8	58
68	Size Dependent Reaction Kinetics on Supported Model Catalysts: A Molecular Beam/IRAS Study of the CO Oxidation on Alumina-Supported Pd Particles. <i>Journal of Physical Chemistry B</i> , 2001, 105, 3567-3576.	2.6	58
69	Microscopic Insights into Methane Activation and Related Processes on Pt/Ceria Model Catalysts. <i>ChemPhysChem</i> , 2010, 11, 1496-1504.	2.1	58
70	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.	2.1	57
71	Electronic Structure of Magnesia-Ceria Model Catalysts, CO <sub>2</sub> Adsorption, and CO <sub>2</sub> Activation: A Synchrotron Radiation Photoelectron Spectroscopy Study. <i>Journal of Physical Chemistry C</i> , 2011, 115, 8716-8724.	3.1	57
72	Formation of interface and surface oxides on supported Pd nanoparticles. <i>Surface Science</i> , 2006, 600, 2528-2542.	1.9	56

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73	Photochemical Energy Storage and Electrochemically Triggered Energy Release in the Norbornadiene-Quadricyclane System: UV-Photochemistry and IR Spectroelectrochemistry in a Combined Experiment. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 2819-2825.	4.6	56
74	Energy Storage in Strained Organic Molecules: (Spectro)Electrochemical Characterization of Norbornadiene and Quadricyclane. <i>ChemSusChem</i> , 2016, 9, 1424-1432.	6.8	55
75	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	53
76	Reaction Kinetics on Complex Model Catalysts under Single Scattering Conditions. <i>Journal of Physical Chemistry B</i> , 2002, 106, 4901-4915.	2.6	53
77	Cluster, facets, and edges: Site-dependent selective chemistry on model catalysts. <i>Chemical Record</i> , 2003, 3, 181-201.	5.8	53
78	Metal deposition in adsorbate atmosphere: growth and decomposition of a palladium carbonyl-like species. <i>Surface Science</i> , 1996, 346, 108-126.	1.9	52
79	Identifying surface species by vibrational spectroscopy: Bridging vs monodentate nitrates. <i>Journal of Catalysis</i> , 2008, 255, 127-133.	6.2	52
80	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.	1.9	50
81	Stabilization of Small Platinum Nanoparticles on Pt-CeO <sub>2</sub> Thin Film Electrocatalysts During Methanol Oxidation. <i>Journal of Physical Chemistry C</i> , 2016, 120, 19723-19736.	3.1	50
82	Insights in Reaction Mechanistic: Isotopic Exchange during the Metalation of Deuterated Tetraphenyl-21,23-D <sub>2</sub> -porphyrin on Cu(111). <i>Journal of Physical Chemistry C</i> , 2014, 118, 26729-26736.	3.1	47
83	Hydrogen spillover monitored by resonant photoemission spectroscopy. <i>Journal of Catalysis</i> , 2012, 285, 6-9.	6.2	45
84	Structure-Dependent Dissociation of Water on Cobalt Oxide. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 2763-2769.	4.6	44
85	Enhanced Activity and Selectivity in Catalytic Methanol Steam Reforming by Basic Alkali Metal Salt Coatings. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 5028-5032.	13.8	43
86	Interactions Between the Room-Temperature Ionic Liquid [C <sub>2</sub> C <sub>1</sub> Im][OTf] and Pd(111), Well-Ordered Al <sub>2</sub> O <sub>3</sub> , and Supported Pd Model Catalysts from IR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2014, 118, 3188-3193.	3.1	43
87	Dissolution of Platinum Single Crystals in Acidic Medium. <i>ChemPhysChem</i> , 2019, 20, 2997-3003.	2.1	42
88	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.	3.2	41
89	The Molecular Origins of Selectivity in Methanol Decomposition on Pd Nanoparticles. <i>Catalysis Letters</i> , 2002, 84, 209-217.	2.6	41
90	Surface reactivity of Pd nanoparticles supported on polycrystalline substrates as compared to thin film model catalysts: infrared study of CH <sub>3</sub> OH adsorption. <i>Journal of Catalysis</i> , 2004, 223, 64-73.	6.2	41

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91	A Combined Density-Functional and IRAS Study on the Interaction of NO with Pd Nanoparticles: Identifying New Adsorption Sites with Novel Properties. <i>Journal of Physical Chemistry C</i> , 2008, 112, 16539-16549.	3.1	41
92	CO <sub>2</sub> activation on single crystal based ceria and magnesia/ceria model catalysts. <i>European Physical Journal B</i> , 2010, 75, 89-100.	1.5	40
93	Quantitative Analysis of the Oxidation State of Cobalt Oxides by Resonant Photoemission Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 6129-6136.	4.6	39
94	Hydrogen Production Based on Liquid Organic Hydrogen Carriers through Sulfur Doped Platinum Catalysts Supported on TiO <sub>2</sub> . <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 6561-6573.	6.7	39
95	Oxidation, Reduction, and Reactivity of Supported Pd Nanoparticles: Mechanism and Microkinetics. <i>Journal of Physical Chemistry C</i> , 2007, 111, 938-949.	3.1	38
96	Conversion of cis- and trans-2-butene with Deuterium on a Pd/Fe <sub>3</sub> O <sub>4</sub> model catalyst. <i>Journal of Catalysis</i> , 2009, 265, 191-198.	6.2	38
97	Ionic Liquid-Modified Electrocatalysts: The Interaction of [C <sub>1</sub> C <sub>2</sub> Im][OTf] with Pt(1 1 1) and its Influence on Methanol Oxidation Studied by Electrochemical IR Spectroscopy. <i>Electrochimica Acta</i> , 2016, 188, 825-836.	5.2	38
98	Ligand Effects at Ionic Liquid-Modified Interfaces: Coadsorption of [C <sub>2</sub> C <sub>1</sub> Im][OTf] and CO on Pd(111). <i>Journal of Physical Chemistry C</i> , 2016, 120, 4453-4465.	3.1	37
99	Solar energy storage at an atomically defined organic-oxide hybrid interface. <i>Nature Communications</i> , 2019, 10, 2384.	12.8	37
100	The temperature dependent growth mode of nickel on the basal plane of graphite. <i>Surface Science</i> , 1995, 327, 321-329.	1.9	36
101	Functionalization of Oxide Surfaces through Reaction with 1,3-Dialkylimidazolium Ionic Liquids. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 30-35.	4.6	36
102	Liquid Organic Hydrogen Carriers: Surface Science Studies of Carbazole Derivatives. <i>Chemical Record</i> , 2014, 14, 879-896.	5.8	36
103	Electron spectroscopy studies of small deposited metal particles. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1995, 76, 301-306.	1.7	35
104	The surface structure matters: thermal stability of phthalic acid anchored to atomically-defined cobalt oxide films. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 10419-10427.	2.8	35
105	Modeling NO <sub>x</sub> Storage Materials: On the Formation of Surface Nitrites and Nitrates and Their Identification by Vibrational Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2008, 112, 6477-6486.	3.1	34
106	Atomically Defined Co <sub>3</sub> O <sub>4</sub> (111) Thin Films Prepared in Ultrahigh Vacuum: Stability under Electrochemical Conditions. <i>Journal of Physical Chemistry C</i> , 2018, 122, 7236-7248.	3.1	34
107	Nanofacet-resolved CO oxidation kinetics on alumina-supported Pd particles. <i>Chemical Physics Letters</i> , 2002, 354, 403-408.	2.6	33
108	Adsorption and Decomposition of Formic Acid on Model Ceria and Pt/Ceria Catalysts. <i>Journal of Physical Chemistry C</i> , 2013, 117, 12483-12494.	3.1	33



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109	Dehydrogenation of the Liquid Organic Hydrogen Carrier System Indole/Indoline/Octahydroindole on Pt(111). <i>Journal of Physical Chemistry C</i> , 2018, 122, 4470-4479.	3.1	33
110	Pd-Ga model SCALMS: Characterization and stability of Pd single atom sites. <i>Journal of Catalysis</i> , 2019, 369, 33-46.	6.2	33
111	The kinetics of methanol oxidation on a supported Pd model catalyst: molecular beam and TR-IRAS experiments. <i>Journal of Catalysis</i> , 2003, 213, 176-190.	6.2	32
112	Site Occupation and Activity of Catalyst Nanoparticles Monitored by In Situ Vibrational Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2003, 42, 3035-3038.	13.8	32
113	Secondary Alcohols as Rechargeable Electrofuels: Electrooxidation of Isopropyl Alcohol at Pt Electrodes. <i>ACS Catalysis</i> , 2020, 10, 6831-6842.	11.2	32
114	Collision-induced desorption of hydrocarbons physisorbed on Au(111). <i>Journal of Chemical Physics</i> , 2000, 112, 1522-1530.	3.0	31
115	Strong Size Effects in Supported Ionic Nanoparticles: Tailoring the Stability of NO <sub>x</sub> Storage Catalysts. <i>Catalysis Letters</i> , 2008, 121, 311-318.	2.6	31
116	Regeneration of LOHC dehydrogenation catalysts: In-situ IR spectroscopy on single crystals, model catalysts, and real catalysts from UHV to near ambient pressure. <i>Applied Surface Science</i> , 2016, 360, 671-683.	6.1	31
117	Catalytically Triggered Energy Release from Strained Organic Molecules: The Surface Chemistry of Quadricyclane and Norbornadiene on Pt(111). <i>Chemistry - A European Journal</i> , 2017, 23, 1613-1622.	3.3	31
118	Electrochemically controlled energy storage in a norbornadiene-based solar fuel with 99% reversibility. <i>Nano Energy</i> , 2019, 63, 103872.	16.0	31
119	Porphyrimetalation at the MgO Nanocube/Toluene Interface. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 22962-22969.	8.0	30
120	On the Role of Different Adsorption and Reaction Sites on Supported Nanoparticles during a Catalytic Reaction: NO Decomposition on a Pd/Alumina Model Catalyst. <i>Journal of Physical Chemistry B</i> , 2004, 108, 14244-14254.	2.6	29
121	Modeling NO <sub>x</sub> Storage Materials: A High-Resolution Photoelectron Spectroscopy Study on the Interaction of NO <sub>2</sub> with Al <sub>2</sub> O <sub>3</sub> /NiAl(110) and BaO/Al <sub>2</sub> O <sub>3</sub> /NiAl(110). <i>Journal of Physical Chemistry C</i> , 2008, 112, 9835-9846.	3.1	29
122	Controlled selectivity for ethanol steam reforming reaction over doped CeO <sub>2</sub> surfaces: The role of gallium. <i>Applied Catalysis B: Environmental</i> , 2020, 277, 119103.	20.2	29
123	Evidence for Pd <sub>x</sub> (CO) <sub>y</sub> compound formation on an alumina substrate. <i>Chemical Physics Letters</i> , 1995, 240, 429-434.	2.6	28
124	Functionalized Porphyrins on an Atomically Defined Oxide Surface: Anchoring and Coverage-Dependent Reorientation of MCTPP on Co <sub>3</sub> O <sub>4</sub> (111). <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 555-560.	4.6	28
125	Operando Identification of the Reversible Skin Layer on Co <sub>3</sub> O <sub>4</sub> as a Three-Dimensional Reaction Zone for Oxygen Evolution. <i>ACS Catalysis</i> , 2022, 12, 3256-3268.	11.2	28
126	Low temperature decomposition of NO on ordered alumina films. <i>Chemical Physics Letters</i> , 2003, 381, 298-305.	2.6	27



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127	Surface Reactions of Dicyclohexylmethane on Pt(111). Journal of Physical Chemistry C, 2015, 119, 20299-20311.	3.1	27
128	Supported homogeneous catalyst makes its own liquid phase. Journal of Catalysis, 2015, 321, 32-38.	6.2	27
129	Katalytische Aktivität und Vergiftung spezifischer aktiver Zentren von Metall-Nanopartikeln auf Trägern. Angewandte Chemie, 2002, 114, 2643-2646.	2.0	26
130	Methane Oxidation Over Pd Supported on Ceria-Alumina Under Rich/Lean Cycling Conditions. Topics in Catalysis, 2013, 56, 410-415.	2.8	26
131	Structural Dynamics of Ultrathin Cobalt Oxide Nanoislands under Potential Control. Advanced Functional Materials, 2021, 31, 2009923.	14.9	26
132	CO adsorption and thermal stability of Pd deposited on a thin FeO(111) film. Surface Science, 2005, 586, 174-182.	1.9	25
133	Isothermal Kinetic Study of Nitric Oxide Adsorption and Decomposition on Pd(111) Surfaces: Molecular Beam Experiments. Journal of Physical Chemistry B, 2005, 109, 13283-13290.	2.6	25
134	Surface sites on Pt-CeO <sub>2</sub> mixed oxide catalysts probed by CO adsorption: a synchrotron radiation photoelectron spectroscopy study. Physical Chemistry Chemical Physics, 2014, 16, 24747-24754.	2.8	25
135	Sensitivity of CO oxidation toward metal oxidation state in ceria-supported catalysts: an operando DRIFTS-MS study. Catalysis Science and Technology, 2016, 6, 818-828.	4.1	25
136	Anchoring of carboxyl-functionalized porphyrins on MgO, TiO <sub>2</sub> , and Co <sub>3</sub> O <sub>4</sub> nanoparticles. Physical Chemistry Chemical Physics, 2018, 20, 24858-24868.	2.8	25
137	Electrochemically controlled energy release from a norbornadiene-based solar thermal fuel: increasing the reversibility to 99.8% using HOPG as the electrode material. Journal of Materials Chemistry A, 2020, 8, 15658-15664.	10.3	25
138	Adsorbate mobilities on catalyst nanoparticles studied via the angular distribution of desorbing products. Surface Science, 2004, 561, L218-L224.	1.9	24
139	Reaction kinetics on model catalysts: Molecular beam methods and time-resolved vibrational spectroscopy. Surface Science, 2005, 587, 55-68.	1.9	24
140	Model Catalytic Studies of Novel Liquid Organic Hydrogen Carriers: Indole, Indoline and Octahydroindole on Pt(111). Chemistry - A European Journal, 2017, 23, 14806-14818.	3.3	24
141	Structure-Dependent Anchoring of Organic Molecules to Atomically Defined Oxide Surfaces: Phthalic Acid on Co <sub>3</sub> O <sub>4</sub> (111), CoO(100), and CoO(111). Chemistry - A European Journal, 2016, 22, 5384-5396.	3.3	23
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276	Disproportionation of Nitric Oxide at a Surfaceâ€Bound Nickel Porphyrinoid. Angewandte Chemie, 0, , .	2.0	0