

Björn Hammer

List of Publications by Year in descending order

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papers

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239
docs citations

239
times ranked

30136
citing authors

#	ARTICLE	IF	CITATIONS
1	Generating stable molecules using imitation and reinforcement learning. Machine Learning: Science and Technology, 2022, 3, 015008.	2.4	4
2	Water Chemistry beneath Graphene: Condensation of a Dense OH ² Phase under Graphene. Journal of Physical Chemistry C, 2022, 126, 4347-4354.	1.5	4
3	Structure of an Ultrathin Oxide on Pt ₃ Sn(111) Solved by Machine Learning Enhanced Global Optimization**. Angewandte Chemie, 2022, 134, .	1.6	3
4	Dimerization of dehydrogenated polycyclic aromatic hydrocarbons on graphene. Journal of Chemical Physics, 2022, 156, 134703.	1.2	3
5	Structure of an Ultrathin Oxide on Pt ₃ Sn(111) Solved by Machine Learning Enhanced Global Optimization**. Angewandte Chemie - International Edition, 2022, 61, .	7.2	15
6	Global optimization of atomic structure enhanced by machine learning. Physical Review B, 2022, 105, .	1.1	22
7	Atomistic global optimization X: A Python package for optimization of atomistic structures. Journal of Chemical Physics, 2022, 157, .	1.2	14
8	Size-dependent phase stability in transition metal dichalcogenide nanoparticles controlled by metal substrates. Nanoscale, 2021, 13, 10167-10180.	2.8	4
9	Gaussian representation for image recognition and reinforcement learning of atomistic structure. Journal of Chemical Physics, 2020, 153, 044107.	1.2	16
10	Atomistic structure learning algorithm with surrogate energy model relaxation. Physical Review B, 2020, 102, .	1.1	21
11	The mechanism of Mg ²⁺ conduction in ammine magnesium borohydride promoted by a neutral molecule. Physical Chemistry Chemical Physics, 2020, 22, 9204-9209.	1.3	70
12	Efficient Global Structure Optimization with a Machine-Learned Surrogate Model. Physical Review Letters, 2020, 124, 086102.	2.9	87
13	Structure prediction of surface reconstructions by deep reinforcement learning. Journal of Physics Condensed Matter, 2020, 32, 404005.	0.7	16
14	NH_3 on anatase TiO_2 : Diffusion mechanisms and the effect of intermolecular repulsion. Physical Review Materials, 2020, 4, .	0.9	5
15	Atomistic structure learning. Journal of Chemical Physics, 2019, 151, .	1.2	26
16	Chemically-resolved determination of hydrogenated graphene's substrate interaction. Physical Chemistry Chemical Physics, 2019, 21, 13462-13466.	1.3	7
17	Constructing convex energy landscapes for atomistic structure optimization. Physical Review B, 2019, 100, .	1.1	8
18	Effects of Gas-Phase Conditions and Particle Size on the Properties of Cu(111)-Supported ZnO Particles Revealed by Global Optimization and Ab Initio Thermodynamics. Journal of Physical Chemistry C, 2019, 123, 30903-30916.	1.5	17

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19	Rotation and diffusion of naphthalene on Pt(111). Journal of Chemical Physics, 2018, 148, 124703.	1.2	3
20	Exciting H ₂ Molecules for Graphene Functionalization. ACS Nano, 2018, 12, 513-520.	7.3	24
21	On-the-Fly Machine Learning of Atomic Potential in Density Functional Theory Structure Optimization. Physical Review Letters, 2018, 120, 026102.	2.9	104
22	Exploration versus Exploitation in Global Atomistic Structure Optimization. Journal of Physical Chemistry A, 2018, 122, 1504-1509.	1.1	56
23	NH ₃ adsorption on anatase-TiO ₂ (101). Journal of Chemical Physics, 2018, 148, 124704.	1.2	11
24	Tight-Binding Approximation-Enhanced Global Optimization. Journal of Chemical Theory and Computation, 2018, 14, 2797-2807.	2.3	31
25	Water Dissociation and Hydroxyl Ordering on Anatase TiO_2 (101) Surfaces. Journal of Physical Chemistry C, 2018, 122, 12470-12480.	1.1	11

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37	Influence of CH ₂ -N Interaction in the Self-Assembly of an Oligo(isoquinolyne-ethynylene) Molecule with Distinct Conformational States. <i>Langmuir</i> , 2017, 33, 10782-10791. Structure of the SnO_2 $\text{Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 707 Td}$ (stretchy="false")	1.6	3
38	stretchy="false") $\text{Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 707 Td}$ (stretchy="false")	2.9	26
39	Supramolecular Corrals on Surfaces Resulting from Aromatic Interactions of Nonplanar Triazoles. <i>ACS Nano</i> , 2017, 11, 8302-8310.	7.3	4
40	Substrate-induced semiconductor-to-metal transition in monolayer WS_2 Physical Review B, 2017, 96, .	1.1	1
41	The influence of coronene super-hydrogenation on the coronene-graphite interaction. <i>Journal of Chemical Physics</i> , 2016, 145, 174708.	1.2	11
42	Pyridine adsorption and diffusion on Pt(111) investigated with density functional theory. <i>Journal of Chemical Physics</i> , 2016, 144, 164112.	1.2	15
43	Structure and role of metal clusters in a metal-organic coordination network determined by density functional theory. <i>Journal of Chemical Physics</i> , 2016, 144, 084708.	1.2	5
44	An automated nudged elastic band method. <i>Journal of Chemical Physics</i> , 2016, 145, 094107.	1.2	72
45	Reduction of CO ₂ with Water on Pt-Loaded Rutile TiO ₂ (110) Modeled with Density Functional Theory. <i>Journal of Physical Chemistry C</i> , 2016, 120, 9160-9164.	1.5	29
46	Crystalline and electronic structure of single-layer TaS_2 Physical Review B, 2016, 94, .	1.1	1
47	Band-gap engineering by Bi intercalation of graphene on Ir(111). <i>Physical Review B</i> , 2016, 93, .	1.1	30
48	Single-layer MoS_2 Au(111): Band gap renormalization and substrate interaction. <i>Physical Review B</i> , 2016, 93, .	1.1	1
49	Selection of conformational states in surface self-assembly for a molecule with eight possible pairs of surface enantiomers. <i>Chemical Communications</i> , 2016, 52, 14023-14026.	2.2	9
50	Symmetry-Driven Band Gap Engineering in Hydrogen Functionalized Graphene. <i>ACS Nano</i> , 2016, 10, 10798-10807.	7.3	55
51	Unravelling Site-Specific Photo-Reactions of Ethanol on Rutile TiO ₂ (110). <i>Scientific Reports</i> , 2016, 6, 21990.	1.6	45
52	Effects of particle size and edge structure on the electronic structure, spectroscopic features, and chemical properties of Au(111)-supported MoS_2 nanoparticles. <i>Faraday Discussions</i> , 2016, 188, 323-343.	1.6	22
53	A comparative study of diastereomeric complexes formed by a prochiral substrate and three structurally analogous chiral molecules on Pt(111). <i>Surface Science</i> , 2016, 646, 13-18.	0.8	9
54	Selection of conformational states in self-assembled surface structures formed from an oligo(naphthylene-ethynylene) 3-bit binary switch. <i>Journal of Chemical Physics</i> , 2015, 142, 101922.	1.2	5

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55	Growth and electronic structure of epitaxial single-layer Au(111). Physical Review B, 2015, 92, .		
56	<i>In Situ</i> Detection of Active Edge Sites in Single-Layer MoS ₂ Catalysts. ACS Nano, 2015, 9, 9322-9330.	7.3	144
57	Isolating a Reaction Intermediate in the Hydrogenation of 2,2,2-Trifluoroacetophenone on Pt(111). Journal of Physical Chemistry C, 2015, 119, 7319-7326.	1.5	10
58	Single-chiral-catalytic-surface-sites: STM and DFT study of stereodirecting complexes formed between (R)-1-(1-naphthyl)ethylamine and ketopantolactone on Pt(111). Catalysis Science and Technology, 2015, 5, 743-753.	2.1	15
59	Sequential oxygen and alkali intercalation of epitaxial graphene on Ir(111): enhanced many-body effects and formation of <i>pn</i> -interfaces. 2D Materials, 2014, 1, 025002.	2.0	36
60	Nucleation and growth of Pt nanoparticles on reduced and oxidized rutile TiO ₂ (110). Journal of Chemical Physics, 2014, 141, 214702.	1.2	27
61	Hydrogen bond rotations as a uniform structural tool for analyzing protein architecture. Nature Communications, 2014, 5, 5803.	5.8	20
62	Understanding intercalation structures formed under graphene on Ir(111). Physical Review B, 2014, 90, .	1.1	36
63	Thermodynamic aspects of dehydrogenation reactions on noble metal surfaces. Journal of Chemical Physics, 2014, 141, 174705.	1.2	15
64	Identification of the Catalytic Site at the Interface Perimeter of Au Clusters on Rutile TiO ₂ (110). ACS Catalysis, 2014, 4, 1626-1631.	5.5	70
65	Modeling Methyl Chloride Photo Oxidation by Oxygen Species on TiO ₂ (110). Topics in Catalysis, 2014, 57, 171-176.	1.3	6
66	Remote Activation of Chemical Bonds in Heterogeneous Catalysis. ACS Catalysis, 2014, 4, 1182-1188.	5.5	28
67	A genetic algorithm for first principles global structure optimization of supported nano structures. Journal of Chemical Physics, 2014, 141, 044711.	1.2	166
68	A Surface Coordination Network Based on Copper Adatom Trimers. Angewandte Chemie - International Edition, 2014, 53, 12955-12959.	7.2	61
69	Structure determination of chemisorbed chirality transfer complexes: Accelerated STM analysis and exchange-correlation functional sensitivity. Surface Science, 2014, 629, 48-56.	0.8	25
70	Walking-like diffusion of two-footed asymmetric aromatic adsorbates on Pt(111). Surface Science, 2014, 629, 123-131.	0.8	19
71	Ein Metallorganisches Netzwerk auf Basis von Cu-Adatom-Trimeren. Angewandte Chemie, 2014, 126, 13169-13173.	1.6	11
72	Role of Steps in the Dissociative Adsorption of Water on Rutile TiO ₂ (110). Journal of Chemical Physics, 2014, 141, 044711.	2.9	61

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73	CO Intercalation of Graphene on Ir(111) in the Millibar Regime. Journal of Physical Chemistry C, 2013, 117, 16438-16447.	1.5	79
74	A density functional theory study of atomic steps on stoichiometric rutile TiO ₂ (110). Journal of Chemical Physics, 2013, 139, 234704.	1.2	12
75	Breakdown of the Graphene Coating Effect under Sequential Exposure to O ₂ and H ₂ S. Journal of Physical Chemistry Letters, 2013, 4, 3770-3774.	2.1	15
76	Adsorption and dehydrogenation of tetrahydroxybenzene on Cu(111). Chemical Communications, 2013, 49, 9308.	2.2	40
77	Controlling Hydrogenation of Graphene on Ir(111). ACS Nano, 2013, 7, 3823-3832.	7.3	69
78	Interaction between Coronene and Graphite from Temperature-Programmed Desorption and DFT-vdW Calculations: Importance of Entropic Effects and Insights into Graphite Interlayer Binding. Journal of Physical Chemistry C, 2013, 117, 13520-13529.	1.5	45
79	Stereodirection of an $\hat{\pm}$ -Ketoester at Sub-molecular Sites on Chirally Modified Pt(111): Heterogeneous Asymmetric Catalysis. Journal of the American Chemical Society, 2013, 135, 9999-10002.	6.6	37
80	Interfacial oxygen under TiO ₂ supported Au clusters revealed by a genetic algorithm search. Journal of Chemical Physics, 2013, 139, 204701.	1.2	15
81	Adsorption, mobility, and dimerization of benzaldehyde on Pt(111). Journal of Chemical Physics, 2012, 136, 174706.	1.2	20
82	EXPERIMENTAL EVIDENCE FOR THE FORMATION OF HIGHLY SUPERHYDROGENATED POLYCYCLIC AROMATIC HYDROCARBONS THROUGH H ATOM ADDITION AND THEIR CATALYTIC ROLE IN H ₂ FORMATION. Astrophysical Journal, 2012, 752, 3.	1.6	75
83	Reduced Step Edges on Rutile TiO_2 Systematic Study of Au_6 Clusters on MgO(100) Scanning Tunneling Microscopy Measurements of the Full Cycle of a Heterogeneous Asymmetric Hydrogenation Reaction on Chirally Modified Pt(111). Journal of Physical Chemistry Letters, 2012, 3, 92-96.	2.9	120
84	Clusters on MgO(100) Centers Using Density-Functional Theory. Physical	2.9	120
85	Scanning Tunneling Microscopy Measurements of the Full Cycle of a Heterogeneous Asymmetric Hydrogenation Reaction on Chirally Modified Pt(111). Journal of Physical Chemistry Letters, 2012, 3, 92-96.	2.1	10
86	Ethanol Diffusion on Rutile TiO ₂ (110) Mediated by H Adatoms. Journal of Physical Chemistry Letters, 2012, 3, 283-288.	2.1	35
87	Study of Alkylthiolate Self-assembled Monolayers on Au(111) Using a Semilocal meta-GGA Density Functional. Journal of Physical Chemistry C, 2012, 116, 7374-7379.	1.5	43
88	Preservation of the Pt(100) surface reconstruction after growth of a continuous layer of graphene. Surface Science, 2012, 606, 464-469.	0.8	22
89	Graphene on metal surfaces and its hydrogen adsorption: A meta-GGA functional study. Physical Review B, 2012, 86, .	1.1	57
90	Graphene Coatings: Probing the Limits of the One Atom Thick Protection Layer. ACS Nano, 2012, 6, 10258-10266.	7.3	89

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91	Packing Defects into Ordered Structures: Strands on TiO_2 . Physical Review Letters, 2012, 108, 236103.	2.9	26
92	Linear hydrogen adsorbate structures on graphite induced by self-assembled molecular monolayers. Carbon, 2012, 50, 2052-2056.	5.4	12
93	Tuning Aryl π -CH π -O Intermolecular Interactions on Pt(111). Journal of Physical Chemistry C, 2011, 115, 1355-1360.	1.5	17
94	Adsorption properties versus oxidation states of rutile TiO_2 (110). Journal of Chemical Physics, 2011, 134, 194703.	1.2	32
95	Direct Evidence for Ethanol Dissociation on Rutile TiO_2 . Journal of Chemical Physics, 2011, 134, 164703.	2.9	58
96	Pyrene: Hydrogenation, hydrogen evolution, and π -band model. Journal of Chemical Physics, 2011, 134, 164703.	1.2	32
97	Steps on rutile TiO_2 (110): Active sites for water and methanol dissociation. Physical Review B, 2011, 84, .	1.1	67
98	Direct Observation of Molecular Preorganization for Chirality Transfer on a Catalyst Surface. Science, 2011, 334, 776-780.	6.0	84
99	Structure and stability of small H clusters on graphene. Physical Review B, 2011, 83, .	1.1	41
100	Self-consistent meta-generalized gradient approximation study of adsorption of aromatic molecules on noble metal surfaces. Journal of Chemical Physics, 2011, 135, 084704.	1.2	38
101	Water Adsorption on TiO_2 . Topics in Catalysis, 2010, 53, 423-430.	1.3	100
102	Dissociative and molecular oxygen chemisorption channels on reduced rutile TiO_2 (110): An STM and TPD study. Surface Science, 2010, 604, 1945-1960.	0.8	132
103	Alkane dimers interaction: A semi-local MGGA functional study. Chemical Physics Letters, 2010, 492, 183-186.	1.2	17
104	Bandgap opening in graphene induced by patterned hydrogen adsorption. Nature Materials, 2010, 9, 315-319.	13.3	1,344
105	Enevoldsen <i>et al.</i> Reply. Physical Review Letters, 2010, 104, .	2.9	11
106	Comment on "Oxygen Vacancy Origin of the Surface Band-Gap State of TiO_2 ". Journal of Chemical Physics, 2010, 132, 259704.	2.9	30
107	CO oxidation on fully oxygen covered Ru(0001): Role of step edges. Physical Review B, 2010, 81, .	1.1	23
108	DFT + U study of defects in bulk rutile TiO_2 . Journal of Chemical Physics, 2010, 133, 144708.	1.2	126

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109	Guanine- and Potassium-Based Two-Dimensional Coordination Network Self-Assembled on Au(111). Journal of the American Chemical Society, 2010, 132, 15927-15929.	6.6	49
110	Enhanced Bonding of Silver Nanoparticles on Oxidized TiO ₂ (110). Journal of Physical Chemistry C, 2010, 114, 16964-16972.	1.5	23
111	Treatment of Layered Structures Using a Semilocal meta-GGA Density Functional. Journal of Physical Chemistry Letters, 2010, 1, 515-519.	2.1	55
112	Electronic structure calculations with GPAW: a real-space implementation of the projector augmented-wave method. Journal of Physics Condensed Matter, 2010, 22, 253202.	0.7	1,451
113	Imaging of the Hydrogen Subsurface Site in Rutile TiO_2 . Physical Review Letters, 2009, 102, 136103.	2.9	84
114	Selective Propene Epoxidation on Immobilized Au ₆ Clusters: The Effect of Hydrogen and Water on Activity and Selectivity. Angewandte Chemie - International Edition, 2009, 48, 1467-1471.	7.2	246
115	Structure and catalytic reactivity of Rh oxides. Catalysis Today, 2009, 145, 227-235.	2.2	71
116	Formation and Diffusion of Water Dimers on Rutile TiO_2 . Physical Review Letters, 2009, 102, 136103.	2.9	89
117	Extended atomic hydrogen dimer configurations on the graphite(0001) surface. Journal of Chemical Physics, 2009, 131, 084706.	1.2	80
118	Observation of All the Intermediate Steps of a Chemical Reaction on an Oxide Surface by Scanning Tunneling Microscopy. ACS Nano, 2009, 3, 517-526.	7.3	101
119	2D [→] 3D Transition for Cationic and Anionic Gold Clusters: A Kinetic Energy Density Functional Study. Journal of the American Chemical Society, 2009, 131, 10605-10609.	6.6	124
120	Effect of subsurface Ti-interstitials on the bonding of small gold clusters on rutile TiO ₂ (110). Journal of Chemical Physics, 2009, 130, 044704.	1.2	42
121	The Role of Interstitial Sites in the Ti <i>3d</i> Defect State in the Band Gap of Titania. Science, 2008, 320, 1755-1759.	6.0	813
122	Activation in Prochiral Reaction Assemblies on Pt(111). Journal of the American Chemical Society, 2008, 130, 5386-5387.	6.6	48
123	Structure and reactivity of a model catalyst alloy under realistic conditions. Journal of Physics Condensed Matter, 2008, 20, 184018.	0.7	47
124	Extended One-Dimensional Supramolecular Assembly on a Stepped Surface. Physical Review Letters, 2008, 100, 046103.	2.9	38
125	Probing Enantioselectivity with X-Ray Photoelectron Spectroscopy and Density Functional Theory. Physical Review Letters, 2007, 98, 136102.	2.9	58
126	Enhanced Bonding of Gold Nanoparticles on Oxidized TiO ₂ (110). Science, 2007, 315, 1692-1696.	6.0	459

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127	Role of Surface Elastic Relaxations in an O-Induced Nanopattern on Pt(110) (1 Å ⁻²). Physical Review Letters, 2007, 98, 115501.	2.9	25
128	Covalent Interlinking of an Aldehyde and an Amine on a Au(111) Surface in Ultrahigh Vacuum. Angewandte Chemie - International Edition, 2007, 46, 9227-9230.	7.2	191
129	Oxidation state of oxide supported nanometric gold. Topics in Catalysis, 2007, 44, 49-56.	1.3	75
130	Metastable Structures and Recombination Pathways for Atomic Hydrogen on the Graphite (0001) Surface. Physical Review Letters, 2006, 96, 156104.	2.9	296
131	Clustering of Chemisorbed H(D) Atoms on the Graphite (0001) Surface due to Preferential Sticking. Physical Review Letters, 2006, 97, 186102.	2.9	260
132	Structure and activity of oxidized Pt(110) and PtO ₂ . Physical Chemistry Chemical Physics, 2006, 8, 1566.	1.3	71
133	Role of Au ⁺ in Supporting and Activating Au ₇ on TiO ₂ (110). Physical Review Letters, 2006, 97, 136107.	2.9	149
134	Chiral switching by spontaneous conformational change in adsorbed organic molecules. Nature Materials, 2006, 5, 112-117.	13.3	213
135	Special Sites at Noble and Late Transition Metal Catalysts. Topics in Catalysis, 2006, 37, 3-16.	1.3	274
136	The Role of the Chiral Modifier on the Enantioselective Hydrogenation of Methyl Pyruvate on Pt(111). Catalysis Letters, 2006, 106, 111-114.	1.4	14
137	Theoretical study of H ₂ O dissociation and CO oxidation on Pt ₂ Mo(111). Journal of Catalysis, 2006, 243, 192-198.	3.1	45
138	Formation and Splitting of Paired Hydroxyl Groups on Reduced TiO ₂ (110). Physical Review Letters, 2006, 96, 066107.	2.9	389
139	Chiral Recognition of Organic Molecules by Atomic Kinks on Surfaces. Physical Review Letters, 2006, 96, 056103.	2.9	120
140	Density functional theory study of water dissociation in a double water bilayer with or without coadsorption of CO on Pt(111). Journal of Chemical Physics, 2006, 124, 184704.	1.2	21
141	Reactivity of a gas/metal/metal-oxide three-phase boundary: CO oxidation at the Pt(111) (4 Å ⁻²)-2CO/PtO ₂ phase boundary. Chemical Physics Letters, 2005, 409, 1-7.	1.2	52
142	One-Dimensional PtO ₂ at Pt Steps: Formation and Reaction with CO. Physical Review Letters, 2005, 95, 256102.	2.9	131
143	The activity of the tetrahedral Au ₂₀ cluster: charging and impurity effects. Journal of Catalysis, 2005, 233, 399-404.	3.1	124
144	Guanine Quartet Networks Stabilized by Cooperative Hydrogen Bonds. Angewandte Chemie - International Edition, 2005, 44, 2270-2275.	7.2	275

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145	Guanine Quartet Networks Stabilized by Cooperative Hydrogen Bonds. <i>Angewandte Chemie</i> , 2005, 117, 2310-2315.	1.6	64
146	Some Recent Theoretical Advances in the Understanding of the Catalytic Activity of Au. <i>ChemInform</i> , 2005, 36, no.	0.1	0
147	Some recent theoretical advances in the understanding of the catalytic activity of Au. <i>Applied Catalysis A: General</i> , 2005, 291, 21-31.	2.2	240
148	Oxygen vacancies on TiO ₂ (110) and their interaction with H ₂ O and O ₂ : A combined high-resolution STM and DFT study. <i>Surface Science</i> , 2005, 598, 226-245.	0.8	560
149	The electronic structure effect in heterogeneous catalysis. <i>Catalysis Letters</i> , 2005, 100, 111-114.	1.4	349
150	Adsorbate-Induced Alloy Phase Separation: A Direct View by High-Pressure Scanning Tunneling Microscopy. <i>Physical Review Letters</i> , 2005, 95, 126101.	2.9	72
151	Structure and Reactivity of Surface Oxides on Pt(110) during Catalytic CO Oxidation. <i>Physical Review Letters</i> , 2005, 95, 255505.	2.9	327
152	Oxygen adsorption at anionic free and supported Au clusters. <i>Journal of Chemical Physics</i> , 2005, 123, 161104.	1.2	76
153	Two-Step Reaction on a Strained, Nanoscale Segmented Surface. <i>Physical Review Letters</i> , 2004, 93, 126104.	2.9	28
154	Oxidation of Pt(110). <i>Physical Review Letters</i> , 2004, 93, 146104.	2.9	129
155	Adsorption, diffusion, and dissociation of molecular oxygen at defected TiO ₂ (110): A density functional theory study. <i>Journal of Chemical Physics</i> , 2004, 120, 988-997.	1.2	251
156	Promoting and poisoning effects of Na and Cl coadsorption on CO oxidation over MgO-supported Au nanoparticles. <i>Journal of Catalysis</i> , 2004, 227, 217-226.	3.1	61
157	CO Desorption Rate Dependence on CO Partial Pressure over Platinum Fuel Cell Catalysts. <i>Fuel Cells</i> , 2004, 4, 309-319.	1.5	49
158	Adsorption of O ₂ and oxidation of CO at Au nanoparticles supported by TiO ₂ (110). <i>Journal of Chemical Physics</i> , 2004, 120, 7673-7680.	1.2	294
159	Theoretical study of CO oxidation on Au nanoparticles supported by MgO(100). <i>Physical Review B</i> , 2004, 69, .	1.1	246
160	Growth of Unidirectional Molecular Rows of Cysteine on Au(110) Driven by Adsorbate-Induced Surface Rearrangements. <i>Physical Review Letters</i> , 2004, 93, 086101.	2.9	112
161	Active Role of Oxide Support during CO Oxidation at Au/MgO. <i>Physical Review Letters</i> , 2003, 90, 206102.	2.9	431
162	Comment on "High Pressure Adsorbate Structures Studied by Scanning Tunneling Microscopy: CO on Pt(111) in Equilibrium with the Gas Phase". <i>Physical Review Letters</i> , 2002, 88, 259601.	2.9	69

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163	H ₂ dissociation at defected Cu: Preference for reaction at vacancy and kink sites. <i>Physical Review B</i> , 2002, 65, .	1.1	37
164	Adsorbate-Oxide Interactions during the NO+CO Reaction on MgO(100) Supported Pd Monolayer Films. <i>Physical Review Letters</i> , 2002, 89, 016102.	2.9	43
165	A density functional theory study of the adsorption of sulfur, mercapto, and methylthiolate on Au(111). <i>Journal of Chemical Physics</i> , 2002, 116, 784-790.	1.2	253
166	An STM and DFT study of the ordered structures of NO on Pd(). <i>Surface Science</i> , 2002, 496, 1-9.	0.8	39
167	Oxygen dissociation at close-packed Pt terraces, Pt steps, and Ag-covered Pt steps studied with density functional theory. <i>Surface Science</i> , 2002, 515, 235-244.	0.8	114
168	Chiral recognition in dimerization of adsorbed cysteine observed by scanning tunnelling microscopy. <i>Nature</i> , 2002, 415, 891-893.	13.7	569
169	Theoretical study of thiol-induced reconstructions on the Au(111) surface. <i>Chemical Physics Letters</i> , 2002, 360, 264-271.	1.2	161
170	Universality in Heterogeneous Catalysis. <i>Journal of Catalysis</i> , 2002, 209, 275-278.	3.1	1,167
171	Density Functional Theory Study of Enantiospecific Adsorption at Chiral Surfaces. <i>Journal of the American Chemical Society</i> , 2002, 124, 14789-14794.	6.6	64
172	Oxygen Dissociation at Pt Steps. <i>Physical Review Letters</i> , 2001, 87, 056103.	2.9	189
173	The CO/Pt(111) Puzzle. <i>Journal of Physical Chemistry B</i> , 2001, 105, 4018-4025.	1.2	642
174	The Brønsted-Evans-Polanyi Relation and the Volcano Plot for Ammonia Synthesis over Transition Metal Catalysts. <i>Journal of Catalysis</i> , 2001, 197, 229-231.	3.1	582
175	The NO+CO Reaction Catalyzed by Flat, Stepped, and Edged Pd Surfaces. <i>Journal of Catalysis</i> , 2001, 199, 171-176.	3.1	146
176	Surface waves on NiAl(110). <i>Physical Review B</i> , 2001, 63, .	1.1	28
177	Distinct Reaction Mechanisms in the Catalytic Oxidation of Carbon Monoxide on Rh(110): Scanning Tunneling Microscopy and Density Functional Theory Studies. <i>Physical Review Letters</i> , 2001, 87, 196104.	2.9	18
178	Coverage dependence of N ₂ dissociation at an N, O, or H precovered Ru(0001) surface investigated with density functional theory. <i>Physical Review B</i> , 2001, 63, .	1.1	67
179	Kinetics of fast island decay on Ag(111). <i>Physical Review B</i> , 2001, 63, .	1.1	42
180	Dynamics of High-Barrier Surface Reactions: Laser-Assisted Associative Desorption of N ₂ from Ru(0001). <i>Physical Review Letters</i> , 2000, 84, 4906-4909.	2.9	37

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181	Adsorption, diffusion, and dissociation of NO, N and O on flat and stepped Ru(0001). Surface Science, 2000, 459, 323-348.	0.8	140
182	Theoretical surface science and catalysisâ€”calculations and concepts. Advances in Catalysis, 2000, 45, 71-129.	0.1	1,776
183	Bond Activation at Monatomic Steps: NO Dissociation at Corrugated Ru(0001). Physical Review Letters, 1999, 83, 3681-3684.	2.9	183
184	Theoretical analysis of hydrogen chemisorption on Pd(111), Re(0001) and PdML/Re(0001), ReML/Pd(111) pseudomorphic overlayers. Physical Review B, 1999, 60, 6146-6154.	1.1	207
185	Nitrogen Adsorption and Hydrogenation on a MoFe ₆ S ₉ Complex. Physical Review Letters, 1999, 82, 4054-4057.	2.9	70
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