Charles T Campbell

List of Publications by Year
in descending order

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165 papers	16,084 citations	17440 63 h-index	16183 124 g-index
173 all docs	173 docs citations	173 times ranked	14851 citing authors

#	Article	IF	Citations
1	Influence of Adhesion on the Chemical Potential of Supported Nanoparticles as Modeled with Spherical Caps. ACS Catalysis, 2022, 12, 2302-2308.	11.2	9
2	Size-Dependent Adsorption and Adhesion Energetics of Ag Nanoparticles on Graphene Films on Ni(111) by Calorimetry. ACS Catalysis, 2022, 12, 2888-2897.	11.2	7
3	Acetonitrile Adsorption and Adhesion Energies onto the Pt(111) Surface by Calorimetry. ACS Catalysis, 2022, 12, 156-163.	11.2	2
4	Energetics of Ag Adsorption on and Adhesion to Rutile TiO₂(100) Studied by Microcalorimetry. Journal of Physical Chemistry C, 2021, 125, 3036-3046.	3.1	8
5	Predicting a Key Catalyst-Performance Descriptor for Supported Metal Nanoparticles: Metal Chemical Potential. ACS Catalysis, 2021, 11, 8284-8291.	11.2	25
6	Nature of the Active Sites on Ni/CeO₂ Catalysts for Methane Conversions. ACS Catalysis, 2021, 11, 10604-10613.	11.2	37
7	Introduction: Advanced Materials and Methods for Catalysis and Electrocatalysis by Transition Metals. Chemical Reviews, 2021, 121, 563-566.	47.7	33
8	Analysis and prediction of reaction kinetics using the degree of rate control. Journal of Catalysis, 2021, 404, 647-660.	6.2	9
9	Effects of Solvents on Adsorption Energies: A General Bond-Additivity Model. Journal of Physical Chemistry C, 2021, 125, 24371-24380.	3.1	14
10	Adhesion Energies of Liquid Hydrocarbon Solvents onto Pt(111), MgO(100), Graphene, and TiO₂(110) from Temperature-Programmed Desorption Energies. Journal of Physical Chemistry C, 2021, 125, 27931-27937.	3.1	3
11	The degree of rate control of catalyst-bound intermediates in catalytic reaction mechanisms: Relationship to site coverage. Journal of Catalysis, 2020, 381, 53-62.	6.2	25
12	Silver Adsorption on Calcium Niobate(001) Nanosheets: Calorimetric Energies That Explain Sinter-Resistant Support. Journal of the American Chemical Society, 2020, 142, 15751-15763.	13.7	4
13	Calorimetric metal vapor adsorption energies for characterizing industrial catalyst support materials. Journal of Catalysis, 2020, 392, 209-216.	6.2	2
14	Ni Nanoparticles on CeO₂(111): Energetics, Electron Transfer, and Structure by Ni Adsorption Calorimetry, Spectroscopies, and Density Functional Theory. ACS Catalysis, 2020, 10, 5101-5114.	11.2	42
15	Energetics and Structure of Nickel Atoms and Nanoparticles on MgO(100). Journal of Physical Chemistry C, 2020, 124, 14685-14695.	3.1	10
16	Kinetic Isotope Effects: Interpretation and Prediction Using Degrees of Rate Control. ACS Catalysis, 2020, 10, 4181-4192.	11.2	24
17	Enhanced Bonding of Pentagonâ€“Heptagon Defects in Graphene to Metal Surfaces: Insights from the Adsorption of Azulene and Naphthalene to Pt(111). Chemistry of Materials, 2020, 32, 1041-1053.	6.7	20
18	Aqueous phase catalytic and electrocatalytic hydrogenation of phenol and benzaldehyde over platinum group metals. Journal of Catalysis, 2020, 382, 372-384.	6.2	68

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19	Catalytic properties of model supported nanoparticles. Journal of Chemical Physics, 2020, 152, 140401.	3.0	3
20	Energetics of Adsorbed Phenol on Ni(111) and Pt(111) by Calorimetry. Journal of Physical Chemistry C, 2019, 123, 7627-7632.	3.1	32
21	A Simple Bond-Additivity Model Explains Large Decreases in Heats of Adsorption in Solvents Versus Gas Phase: A Case Study with Phenol on Pt(111) in Water. ACS Catalysis, 2019, 9, 8116-8127.	11.2	52
22	The kinetics of elementary thermal reactions in heterogeneous catalysis. Nature Reviews Chemistry, 2019, 3, 723-732.	30.2	31
23	Adhesion Energies of Solvent Films to Pt(111) and Ni(111) Surfaces by Adsorption Calorimetry. ACS Catalysis, 2019, 9, 11819-11825.	11.2	14
24	Apparent Activation Energies in Complex Reaction Mechanisms: A Simple Relationship via Degrees of Rate Control. ACS Catalysis, 2019, 9, 9465-9473.	11.2	71
25	Quantifying Adsorption of Organic Molecules on Platinum in Aqueous Phase by Hydrogen Site Blocking and in Situ X-ray Absorption Spectroscopy. ACS Catalysis, 2019, 9, 6869-6881.	11.2	40
26	Energies of Adsorbed Catalytic Intermediates on Transition Metal Surfaces: Calorimetric Measurements and Benchmarks for Theory. Accounts of Chemical Research, 2019, 52, 984-993.	15.6	38
27	Origin of Thermal and Hyperthermal CO₂ from CO Oxidation on Pt Surfaces: The Role of Postâ€Transitionâ€State Dynamics, Active Sites, and Chemisorbed CO₂. Angewandte Chemie, 2019, 131, 6990-6994.	2.0	7
28	Origin of Thermal and Hyperthermal CO₂ from CO Oxidation on Pt Surfaces: The Role of Postâ€Transitionâ€State Dynamics, Active Sites, and Chemisorbed CO₂. Angewandte Chemie - International Edition, 2019, 58, 6916-6920.	13.8	31
29	Energetics of Au Adsorption and Film Growth on Pt(111) by Single-Crystal Adsorption Calorimetry. Journal of Physical Chemistry C, 2019, 123, 5557-5561.	3.1	4
30	Heats of Adsorption of N₂, CO, Ar, and CH₄ versus Coverage on the Zr-Based MOF NU-1000: Measurements and DFT Calculations. Journal of Physical Chemistry C, 2019, 123, 6586-6591.	3.1	8
31	Impact of pH on Aqueous-Phase Phenol Hydrogenation Catalyzed by Carbon-Supported Pt and Rh. ACS Catalysis, 2019, 9, 1120-1128.	11.2	55
32	Energetics of adsorbed benzene on Ni(111) and Pt(111) by calorimetry. Surface Science, 2018, 676, 9-16.	1.9	26
33	Adsorbed Hydroxyl and Water on Ni(111): Heats of Formation by Calorimetry. ACS Catalysis, 2018, 8, 1485-1489.	11.2	29
34	Energetics of van der Waals Adsorption on the Metalâ€“Organic Framework NU-1000 with Zr₆-oxo, Hydroxo, and Aqua Nodes. Journal of the American Chemical Society, 2018, 140, 328-338.	13.7	11
35	Bond Energies of Adsorbed Intermediates to Metal Surfaces: Correlation with Hydrogenâ€“Ligand and Hydrogenâ€“Surface Bond Energies and Electronegativities. Angewandte Chemie, 2018, 130, 17119-17123.	2.0	2
36	Carbon-supported Pt during aqueous phenol hydrogenation with and without applied electrical potential: X-ray absorption and theoretical studies of structure and adsorbates. Journal of Catalysis, 2018, 368, 8-19.	6.2	49

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37	Bond Energies of Adsorbed Intermediates to Metal Surfaces: Correlation with Hydrogenâ€“Ligand and Hydrogenâ€“Surface Bond Energies and Electronegativities. Angewandte Chemie - International Edition, 2018, 57, 16877-16881.	13.8	7
38	Energetics of Adsorbed Methanol and Methoxy on Ni(111): Comparisons to Pt(111). ACS Catalysis, 2018, 8, 10089-10095.	11.2	7
39	The physical chemistry and materials science behind sinter-resistant catalysts. Chemical Society Reviews, 2018, 47, 4314-4331.	38.1	236
40	Velocity-resolved kinetics of site-specific carbon monoxide oxidation on platinum surfaces. Nature, 2018, 558, 280-283.	27.8	92
41	Energetics of 2D and 3D Gold Nanoparticles on MgO(100): Influence of Particle Size and Defects on Gold Adsorption and Adhesion Energies. ACS Catalysis, 2017, 7, 2151-2163.	11.2	14
42	DFT-Based Method for More Accurate Adsorption Energies: An Adaptive Sum of Energies from RPBE and vdW Density Functionals. Journal of Physical Chemistry C, 2017, 121, 4937-4945.	3.1	80
43	The Degree of Rate Control: A Powerful Tool for Catalysis Research. ACS Catalysis, 2017, 7, 2770-2779.	11.2	327
44	Energetics of Adsorbed Methyl and Methyl Iodide on Ni(111) by Calorimetry: Comparison to Pt(111) and Implications for Catalysis. ACS Catalysis, 2017, 7, 1286-1294.	11.2	20
45	Trends in Adhesion Energies of Metal Nanoparticles on Oxide Surfaces: Understanding Support Effects in Catalysis and Nanotechnology. ACS Nano, 2017, 11, 1196-1203.	14.6	121
46	Direct Measurements of Half-Cycle Reaction Heats during Atomic Layer Deposition by Calorimetry. Chemistry of Materials, 2017, 29, 8566-8577.	6.7	33
47	Formic Acid Dissociative Adsorption on NiO(111): Energetics and Structure of Adsorbed Formate. Journal of Physical Chemistry C, 2017, 121, 28001-28006.	3.1	9
48	Chemical Potential of Metal Atoms in Supported Nanoparticles: Dependence upon Particle Size and Support. ACS Catalysis, 2017, 7, 8460-8466.	11.2	88
49	Energetics of adsorbed formate and formic acid on Ni(111) by calorimetry. Journal of Catalysis, 2017, 352, 300-304.	6.2	21
50	Calorimetric measurement of adsorption and adhesion energies of Cu on Pt(111). Surface Science, 2017, 657, 58-62.	1.9	5
51	Calcium Vapor Adsorption on the Metalâ€“Organic Framework NU-1000: Structure and Energetics. Journal of Physical Chemistry C, 2016, 120, 16850-16862.	3.1	16
52	Equilibrium Constants and Rate Constants for Adsorbates: Two-Dimensional (2D) Ideal Gas, 2D Ideal Lattice Gas, and Ideal Hindered Translator Models. Journal of Physical Chemistry C, 2016, 120, 10283-10297.	3.1	94
53	Electrocatalytic Hydrogenation of Phenol over Platinum and Rhodium: Unexpected Temperature Effects Resolved. ACS Catalysis, 2016, 6, 7466-7470.	11.2	86
54	Reply to â€œComment on â€˜Equilibrium Constants and Rate Constants for Adsorbates: Two-Dimensional (2D) Ideal Gas, 2D Ideal Lattice Gas, and Ideal Hindered Translator Modelsâ€™â€• Journal of Physical Chemistry C, 2016, 120, 20481-20482.	3.1	5

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55	Energies of Formation Reactions Measured for Adsorbates on Late Transition Metal Surfaces. Journal of Physical Chemistry C, 2016, 120, 25161-25172.	3.1	63
56	Water Dissociative Adsorption on NiO(111): Energetics and Structure of the Hydroxylated Surface. ACS Catalysis, 2016, 6, 7377-7384.	11.2	67
57	Catalysis: Quantifying charge transfer. Nature Energy, 2016, 1, .	39.5	5
58	Adsorption and Adhesion of Au on Reduced CeO₂(111) Surfaces at 300 and 100 K. Journal of Physical Chemistry C, 2016, 120, 12113-12124.	3.1	29
59	Hindered Translator and Hindered Rotor Models for Adsorbates: Partition Functions and Entropies. Journal of Physical Chemistry C, 2016, 120, 9719-9731.	3.1	113
60	Energetics of methanol and formic acid oxidation on Pt(111): Mechanistic insights from adsorption calorimetry. Surface Science, 2016, 650, 140-143.	1.9	17
61	Toward Benchmarking in Catalysis Science: Best Practices, Challenges, and Opportunities. ACS Catalysis, 2016, 6, 2590-2602.	11.2	190
62	Using degrees of rate control to improve selective n-butane oxidation over model MOF-encapsulated catalysts: sterically-constrained Ag₃Pd(111). Faraday Discussions, 2016, 188, 21-38.	3.2	15
63	Ion scattering spectroscopy intensities for supported nanoparticles: The hemispherical cap model. Surface Science, 2015, 641, 166-169.	1.9	15
64	Surface-Bound Intermediates in Low-Temperature Methanol Synthesis on Copper: Participants and Spectators. ACS Catalysis, 2015, 5, 7328-7337.	11.2	77
65	Energetics of Cu Adsorption and Adhesion onto Reduced CeO₂(111) Surfaces by Calorimetry. Journal of Physical Chemistry C, 2015, 119, 17209-17217.	3.1	47
66	Degree of rate control approach to computational catalyst screening. Journal of Catalysis, 2015, 330, 197-207.	6.2	105
67	A benchmark database for adsorption bond energies to transition metal surfaces and comparison to selected DFT functionals. Surface Science, 2015, 640, 36-44.	1.9	396
68	Calcium Thin Film Growth on Phenyl-C₆₁-Butyric Acid Methyl Ester (PCBM): Interface Structure and Energetics. Journal of Physical Chemistry C, 2015, 119, 18444-18451.	3.1	13
69	Energy of Supported Metal Catalysts: From Single Atoms to Large Metal Nanoparticles. ACS Catalysis, 2015, 5, 5673-5678.	11.2	78
70	Quantitative modeling of electron spectroscopy intensities for supported nanoparticles: The hemispherical cap model for non-normal detection. Surface Science, 2015, 632, L5-L8.	1.9	6
71	Method for direct deconvolution of heat signals in transient adsorption calorimetry. Surface Science, 2015, 633, 17-23.	1.9	3
72	Energetics of Adsorbed CH₂ and CH on Pt(111) by Calorimetry: The Dissociative Adsorption of Diiodomethane. Journal of Physical Chemistry C, 2014, 118, 29310-29321.	3.1	13

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73	Adsorption Energy of tert-Butyl on Pt(111) by Dissociation of tert-Butyl Iodide: Calorimetry and DFT. Journal of Physical Chemistry C, 2014, 118, 427-438.	3.1	22
74	Low-Temperature Growth Improves Metal/Polymer Interfaces: Vapor-Deposited Ca on PMMA. Journal of Physical Chemistry C, 2014, 118, 6352-6358.	3.1	3
75	Bond Energies of Molecular Fragments to Metal Surfaces Track Their Bond Energies to H Atoms. Journal of the American Chemical Society, 2014, 136, 4137-4140.	13.7	25
76	Energetics of Formic Acid Conversion to Adsorbed Formates on Pt(111) by Transient Calorimetry. Journal of the American Chemical Society, 2014, 136, 3964-3971.	13.7	44
77	Anchored metal nanoparticles: Effects of support and size on their energy, sintering resistance and reactivity. Faraday Discussions, 2013, 162, 9.	3.2	161
78	D. W. (â€œWayneâ€) Goodman: A Pioneer in Elucidating the Relationships Between Surface Structure of Catalysts and Their Performance, and in Using Model Catalysts for That Purpose. Topics in Catalysis, 2013, 56, 1273-1276.	2.8	4
79	Silver Nanoparticles on Fe₃O₄(111): Energetics by Ag Adsorption Calorimetry and Structure by Surface Spectroscopies. Journal of Physical Chemistry C, 2013, 117, 24932-24936.	3.1	23
80	Kinetic Prefactors of Reactions on Solid Surfaces. Zeitschrift Fur Physikalische Chemie, 2013, 227, .	2.8	81
81	A Sinter-Resistant Catalytic System Fabricated by Maneuvering the Selectivity of SiO₂ Deposition onto the TiO₂ Surface versus the Pt Nanoparticle Surface. Nano Letters, 2013, 13, 4957-4962.	9.1	101
82	Energetics of Adsorbed CH₃ on Pt(111) by Calorimetry. Journal of the American Chemical Society, 2013, 135, 5208-5211.	13.7	33
83	Surface kinetics and energetics from single crystal adsorption calorimetry lineshape analysis: Methyl from methyl iodide on Pt(111). Journal of Catalysis, 2013, 308, 114-121.	6.2	11
84	Enthalpies and Entropies of Adsorption on Well-Defined Oxide Surfaces: Experimental Measurements. Chemical Reviews, 2013, 113, 4106-4135.	47.7	211
85	The Energetics of Supported Metal Nanoparticles: Relationships to Sintering Rates and Catalytic Activity. Accounts of Chemical Research, 2013, 46, 1712-1719.	15.6	300
86	Energetics of Adsorbed CH₃ and CH on Pt(111) by Calorimetry: Dissociative Adsorption of CH₃I. Journal of Physical Chemistry C, 2013, 117, 6325-6336.	3.1	24
87	Adsorption calorimetry during metal vapor deposition on single crystal surfaces: Increased flux, reduced optical radiation, and real-time flux and reflectivity measurements. Review of Scientific Instruments, 2013, 84, 123901.	1.3	21
88	Kinetic Prefactors of Reactions on Solid Surfaces. Zeitschrift Fur Physikalische Chemie, 2013, .	2.8	5
89	Energetics of Oxygen Adatoms, Hydroxyl Species and Water Dissociation on Pt(111). Journal of Physical Chemistry C, 2012, 116, 25772-25776.	3.1	62
90	The Entropies of Adsorbed Molecules. Journal of the American Chemical Society, 2012, 134, 18109-18115.	13.7	364

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91	Ca Carboxylate Formation at the Calcium/Poly(methyl methacrylate) Interface. Journal of Physical Chemistry C, 2012, 116, 20465-20471.	3.1	31
92	A Highly Reactive and Sinterâ€Resistant Catalytic System Based on Platinum Nanoparticles Embedded in the Inner Surfaces of CeO₂ Hollow Fibers. Angewandte Chemie - International Edition, 2012, 51, 9543-9546.	13.8	121
93	Energetics of Adsorbed Methanol and Methoxy on Pt(111) by Microcalorimetry. Journal of the American Chemical Society, 2012, 134, 20388-20395.	13.7	70
94	Electronic perturbations. Nature Chemistry, 2012, 4, 597-598.	13.6	610
95	Built-In Potential in Conjugated Polymer Diodes with Changing Anode Work Function: Interfacial States and Deviation from the Schottkyâ€“Mott Limit. Journal of Physical Chemistry Letters, 2012, 3, 1202-1207.	4.6	50
96	Energy of Molecularly Adsorbed Water on Clean Pt(111) and Pt(111) with Coadsorbed Oxygen by Calorimetry. Journal of Physical Chemistry C, 2011, 115, 9164-9170.	3.1	61
97	The Energy of Adsorbed Hydroxyl on Pt(111) by Microcalorimetry. Journal of Physical Chemistry C, 2011, 115, 11586-11594.	3.1	47
98	Insights into catalysis by gold nanoparticles and their support effects through surface science studies of model catalysts. Faraday Discussions, 2011, 152, 227.	3.2	78
99	Growth, Structure, and Stability of Ag on CeO₂(111): Synchrotron Radiation Photoemission Studies. Journal of Physical Chemistry C, 2011, 115, 6715-6725.	3.1	78
100	The Energy of Hydroxyl Coadsorbed with Water on Pt(111). Journal of Physical Chemistry C, 2011, 115, 23008-23012.	3.1	45
101	Adsorption Microcalorimetry: Recent Advances in Instrumentation and Application. Annual Review of Analytical Chemistry, 2011, 4, 41-58.	5.4	26
102	An improved single crystal adsorption calorimeter for determining gas adsorption and reaction energies on complex model catalysts. Review of Scientific Instruments, 2011, 82, 024102.	1.3	58
103	A Sinterâ€Resistant Catalytic System Based on Platinum Nanoparticles Supported on TiO₂ Nanofibers and Covered by Porous Silica. Angewandte Chemie - International Edition, 2010, 49, 8165-8168.	13.8	125
104	Improved pyroelectric detectors for single crystal adsorption calorimetry from 100 to 350 K. Review of Scientific Instruments, 2010, 81, 024102.	1.3	54
105	Ag Adsorption on Reduced CeO₂(111) Thin Films. Journal of Physical Chemistry C, 2010, 114, 17166-17172.	3.1	67
106	Ceria Maintains Smaller Metal Catalyst Particles by Strong Metal-Support Bonding. Science, 2010, 329, 933-936.	12.6	763
107	Particle-size dependent heats of adsorption of CO on supported Pd nanoparticles as measured with a single-crystal microcalorimeter. Physical Review B, 2010, 81, .	3.2	77
108	Degree of Rate Control: How Much the Energies of Intermediates and Transition States Control Rates. Journal of the American Chemical Society, 2009, 131, 8077-8082.	13.7	461

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109	Catalytic reaction energetics by single crystal adsorption calorimetry: hydrocarbons on Pt(111). Chemical Society Reviews, 2008, 37, 2172.	38.1	46
110	Calcium Adsorption on MgO(100):â€‰ Energetics, Structure, and Role of Defects. Journal of the American Chemical Society, 2008, 130, 2314-2322.	13.7	45
111	Energetics of Cyclohexene Adsorption and Reaction on Pt(111) by Low-Temperature Microcalorimetry. Journal of the American Chemical Society, 2008, 130, 10247-10257.	13.7	65
112	Kinetic model for sintering of supported metal particles with improved size-dependent energetics and applications to Au onTiO2(110). Physical Review B, 2007, 75, .	3.2	136
113	SPR microscopy and its applications to high-throughput analyses of biomolecular binding events and their kinetics. Biomaterials, 2007, 28, 2380-2392.	11.4	367
114	Reactivity and sintering kinetics of Au/TiO2(110) model catalysts: particle size effects. Topics in Catalysis, 2007, 44, 3-13.	2.8	74
115	Thermodynamics of Statherin Adsorption onto Hydroxyapatite. Biochemistry, 2006, 45, 5576-5586.	2.5	74
116	Heat of Adsorption of Naphthalene on Pt(111) Measured by Adsorption Calorimetry. Journal of Physical Chemistry B, 2006, 110, 17539-17545.	2.6	73
117	n-alkanes on Pt(111) and on C(0001)âˆ•Pt(111): Chain length dependence of kinetic desorption parameters. Journal of Chemical Physics, 2006, 125, 234308.	3.0	170
118	Transition Metal Oxides: Extra Thermodynamic Stability as Thin Films. Physical Review Letters, 2006, 96, 066106.	7.8	78
119	Pyroelectric heat detector for measuring adsorption energies on thicker single crystals. Sensors and Actuators B: Chemical, 2005, 107, 454-460.	7.8	19
120	Heats of adsorption of Pb on pristine and electron-irradiated poly(methyl methacrylate) by microcalorimetry. Surface Science, 2005, 598, 22-34.	1.9	20
121	n-alkanes on MgO(100). I. Coverage-dependent desorption kinetics of n-butane. Journal of Chemical Physics, 2005, 122, 164707.	3.0	120
122	n-alkanes on MgO(100). II. Chain length dependence of kinetic desorption parameters for small n-alkanes. Journal of Chemical Physics, 2005, 122, 164708.	3.0	156
123	Small Pd Clusters, up to the Tetramer At Least, Are Highly Mobile on the MgO(100) Surface. Physical Review Letters, 2005, 95, 146103.	7.8	87
124	CHEMISTRY: Oxygen Vacancies and Catalysis on Ceria Surfaces. Science, 2005, 309, 713-714.	12.6	1,103
125	Calorimeter for adsorption energies of larger molecules on single crystal surfaces. Review of Scientific Instruments, 2004, 75, 4471-4480.	1.3	60
126	Calorimetric Measurement of the Heat of Adsorption of Benzene on Pt(111)â€. Journal of Physical Chemistry B, 2004, 108, 14627-14633.	2.6	130

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127	PHYSICS: The Active Site in Nanoparticle Gold Catalysis. Science, 2004, 306, 234-235.	12.6	327
128	Cyclohexane Dehydrogenation and H2 Adsorption on Pt Particles on ZnO(0001)â^'O. Journal of Physical Chemistry B, 2003, 107, 1180-1188.	2.6	20
129	Benzene Adsorption and Dehydrogenation on Pt/ZnO(0001)â^'O Model Catalysts. Journal of Physical Chemistry B, 2003, 107, 1174-1179.	2.6	12
130	SURFACE SCIENCE: Enhanced: Waltzing with O2. Science, 2003, 299, 357-357.	12.6	21
131	Metal Adsorption and Adhesion Energies on MgO(100). Journal of the American Chemical Society, 2002, 124, 9212-9218.	13.7	79
132	The Effect of Size-Dependent Nanoparticle Energetics on Catalyst Sintering. Science, 2002, 298, 811-814.	12.6	907
133	Methanol Decomposition on Pt/ZnO(0001)â^'Zn Model Catalysts. Journal of Physical Chemistry B, 2001, 105, 9273-9279.	2.6	26
134	Enthalpies of adsorption of metal atoms on single-crystalline surfaces by microcalorimetry. Journal of Chemical Thermodynamics, 2001, 33, 333-345.	2.0	18
135	Finding the Rate-Determining Step in a Mechanism. Journal of Catalysis, 2001, 204, 520-524.	6.2	255
136	Pyroelectric detector for single-crystal adsorption microcalorimetry: analysis of pulse shape and intensity. Sensors and Actuators B: Chemical, 2000, 62, 13-22.	7.8	33
137	Title is missing!. Topics in Catalysis, 2000, 14, 43-51.	2.8	67
138	The influence of chlorine on the dispersion of Cu particles on Cu/ZnO(0001) model catalysts. Catalysis Letters, 2000, 65, 159-168.	2.6	14
139	Quantification of Tight Binding to Surface-Immobilized Phospholipid Vesicles Using Surface Plasmon Resonance:â€‰ Binding Constant of Phospholipase A2. Journal of the American Chemical Society, 2000, 122, 4177-4184.	13.7	100
140	Surface Characterization of Hydroxyapatite and Related Calcium Phosphates by XPS and TOF-SIMS. Analytical Chemistry, 2000, 72, 2886-2894.	6.5	300
141	Sticking Probabilities in Adsorption of Alkanethiols from Liquid Ethanol Solution onto Gold. Journal of Physical Chemistry B, 2000, 104, 11168-11178.	2.6	107
142	The kinetics of CO oxidation by adsorbed oxygen on wellâ€defined gold particles on TiO2(110). Catalysis Letters, 1999, 63, 143-151.	2.6	203
143	A microcalorimetric study of the heat of adsorption of copper on well-defined oxide thin film surfaces: MgO(100), p(2Ã—1) oxide on Mo(100) and disordered W oxide. Faraday Discussions, 1999, 114, 195-208.	3.2	51
144	Organofunctionalization of TiO2(110):â€‰ (3,3,3-Trifluoropropyl)trimethoxysilane Adsorption. Journal of Physical Chemistry B, 1998, 102, 4536-4543.	2.6	30

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145	A novel single-crystal adsorption calorimeter and additions for determining metal adsorption and adhesion energies. Review of Scientific Instruments, 1998, 69, 2427-2438.	1.3	124
146	Metal adsorption calorimetry and adhesion energies on clean single-crystal surfaces. Journal of Chemical Physics, 1997, 107, 5547-5553.	3.0	57
147	Calorimetric measurements of the energetics of Pb adsorption and adhesion to Mo(100). Physical Review B, 1997, 56, 13496-13502.	3.2	28
148	Ultrathin metal films and particles on oxide surfaces: structural, electronic and chemisorptive properties. Surface Science Reports, 1997, 27, 1-111.	7.2	1,529
149	A New Single-Crystal Adsorption Calorimeter for Determining Metal Adsorption and Adhesion Energies. Materials Research Society Symposia Proceedings, 1996, 440, 103.	0.1	1
150	Quantitative Investigation of the Decomposition of Cyclooctene on Pt(111) Using BPTDS. The Journal of Physical Chemistry, 1996, 100, 8402-8407.	2.9	9
151	Methanol synthesis and reverse water-gas shift kinetics over clean polycrystalline copper. Catalysis Letters, 1995, 31, 313-324.	2.6	157
152	A high pressure cell and transfer rod for ultrahigh vacuum chambers. Review of Scientific Instruments, 1995, 66, 4370-4374.	1.3	11
153	The chemisorption of methanol on Cu films on ZnO(000ï¿½1)-O. Catalysis Letters, 1994, 25, 277-292.	2.6	32
154	Future Directions and Industrial Perspectives Micro- and macro-kinetics: Their relationship in heterogeneous catalysis. Topics in Catalysis, 1994, 1, 353-366.	2.8	266
155	Structure of coadsorbed bismuth and hydrocarbons on Pt(111). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1993, 11, 2128-2132.	2.1	13
156	Forward and Reverse Waterâ€"Gas Shift Reactions on Model Copper Catalysts. ACS Symposium Series, 1992, , 130-142.	0.5	18
157	Comment on: Interaction of carbon dioxide with clean and oxygenated Cu(110) surfaces, by T. Schneider and W. Hirschwald. Catalysis Letters, 1992, 16, 455-457.	2.6	4
158	The dissociative adsorption of H2 and D2 on Cu(110): activation barriers and dynamics. Surface Science, 1991, 259, 1-17.	1.9	101
159	Energy requirements for the dissociative adsorption of hydrogen on Cu(110). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1991, 9, 1693-1697.	2.1	15
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