Wen-Chi Liu

List of Publications by Year
in descending order

183 papers	16,007 citations	13099 68 h-index	17105 122 g-index
191 all docs	191 docs citations	191 times ranked	17292 citing authors

#	Article	IF	Citations
1	Metallic Nanoparticles in Heterogeneous Catalysis. Catalysis Letters, 2021, 151, 2153.	2.6	50
2	Insights into the Mechanism of Methanol Steam Reforming Tandem Reaction over CeO₂ Supported Single-Site Catalysts. Journal of the American Chemical Society, 2021, 143, 12074-12081.	13.7	70
3	Mechanism of Methanol Decomposition over Single-Site Pt₁/CeO₂ Catalyst: A DRIFTS Study. Journal of the American Chemical Society, 2021, 143, 60-64.	13.7	41
4	Nanoparticle Assembly Induced Ligand Interactions for Enhanced Electrocatalytic CO₂ Conversion. Journal of the American Chemical Society, 2021, 143, 19919-19927.	13.7	32
5	Application of Single-Site Catalysts in the Hydrogen Economy. Trends in Chemistry, 2020, 2, 1114-1125.	8.5	10
6	Selective CO2 electrocatalysis at the pseudocapacitive nanoparticle/ordered-ligand interlayer. Nature Energy, 2020, 5, 1032-1042.	39.5	99
7	Individually Encapsulated Frame-in-Frame Structure. , 2020, 2, 685-690.		10
8	A mini review of cobalt-based nanocatalyst in Fischer-Tropsch synthesis. Applied Catalysis A: General, 2020, 602, 117701.	4.3	60
9	Integrating the Fields of Catalysis: Active Site Engineering in Metal Cluster, Metal Organic Framework and Metal Single Site. Topics in Catalysis, 2020, 63, 628-634.	2.8	10
10	Oligomerization of Light Olefins Catalyzed by BrÃ¸nsted-Acidic Metalâ€“Organic Framework-808. Journal of the American Chemical Society, 2019, 141, 11557-11564.	13.7	55
11	Efficient Hydrogen Production from Methanol Using a Single-Site Pt₁/CeO₂ Catalyst. Journal of the American Chemical Society, 2019, 141, 17995-17999.	13.7	114
12	Identification of the strong BrÃ¸nsted acid site in a metalâ€“organic framework solid acid catalyst. Nature Chemistry, 2019, 11, 170-176.	13.6	198
13	Catalytic 1-Propanol Oxidation on Size-Controlled Platinum Nanoparticles at Solidâ€“Gas and Solidâ€“Liquid Interfaces: Significant Differences in Kinetics and Mechanisms. Journal of Physical Chemistry C, 2019, 123, 7577-7583.	3.1	8
14	Supported Au Nanoparticles with N-Heterocyclic Carbene Ligands as Active and Stable Heterogeneous Catalysts for Lactonization. Journal of the American Chemical Society, 2018, 140, 4144-4149.	13.7	108
15	Bimetallic Cobalt Nanoparticles (Coâ€“M): Synthesis, Characterization, and Application in the Fischerâ€“Tropsch Process. Topics in Catalysis, 2018, 61, 1002-1015.	2.8	6
16	Foundations and strategies of the construction of hybrid catalysts for optimized performances. Nature Catalysis, 2018, 1, 318-325.	34.4	133
17	Fluoroethylene Carbonate Induces Ordered Electrolyte Interface on Silicon and Sapphire Surfaces as Revealed by Sum Frequency Generation Vibrational Spectroscopy and X-ray Reflectivity. Nano Letters, 2018, 18, 2105-2111.	9.1	42
18	Identifying the Decomposition of Diethyl Carbonate in Binary Electrolyte Solutions in Contact with Silicon Anodes - A Sum Frequency Generation Vibrational Spectroscopy Study. Industrial & Engineering Chemistry Research, 2018, 57, 1480-1486.	3.7	13

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19	Fluoroethylene Carbonate as a Directing Agent in Amorphous Silicon Anodes: Electrolyte Interface Structure Probed by Sum Frequency Vibrational Spectroscopy and Ab Initio Molecular Dynamics. Nano Letters, 2018, 18, 1145-1151.	9.1	59
20	Surface Science Approach to the Molecular Level Integration of the Principles in Heterogeneous, Homogeneous, and Enzymatic Catalysis. Topics in Catalysis, 2018, 61, 1210-1217.	2.8	5
21	Specific Metalâ€“Support Interactions between Nanoparticle Layers for Catalysts with Enhanced Methanol Oxidation Activity. ACS Catalysis, 2018, 8, 5391-5398.	11.2	63
22	The Methanol Economy: Methane and Carbon Dioxide Conversion. Topics in Catalysis, 2018, 61, 530-541.	2.8	58
23	Surface Structures of Model Metal Catalysts in Reactant Gases. Journal of Physical Chemistry B, 2018, 122, 425-431.	2.6	6
24	Bioinspired Metalâ€“Organic Framework Catalysts for Selective Methane Oxidation to Methanol. Journal of the American Chemical Society, 2018, 140, 18208-18216.	13.7	301
25	Acidic effect of porous alumina as supports for Pt nanoparticle catalysts in n-hexane reforming. Catalysis Science and Technology, 2018, 8, 3295-3303.	4.1	16
26	Molecular Orientations Change Reaction Kinetics and Mechanism: A Review on Catalytic Alcohol Oxidation in Gas Phase and Liquid Phase on Size-Controlled Pt Nanoparticles. Catalysts, 2018, 8, 226.	3.5	16
27	Platinum and Other Transition Metal Nanoclusters (Pd, Rh) Stabilized by PAMAM Dendrimer as Excellent Heterogeneous Catalysts: Application to the Methylcyclopentane (MCP) Hydrogenative Isomerization. Nano Letters, 2017, 17, 1853-1862.	9.1	60
28	Activation of Tungsten Oxide for Propane Dehydrogenation and Its High Catalytic Activity and Selectivity. Catalysis Letters, 2017, 147, 622-632.	2.6	47
29	Fluorinated Endâ€Groups in Electrolytes Induce Ordered Electrolyte/Anode Interface Even at Openâ€Circuit Potential as Revealed by Sum Frequency Generation Vibrational Spectroscopy. Advanced Energy Materials, 2017, 7, 1602060.	19.5	29
30	A Comparison of Photocatalytic Activities of Gold Nanoparticles Following Plasmonic and Interband Excitation and a Strategy for Harnessing Interband Hot Carriers for Solution Phase Photocatalysis. ACS Central Science, 2017, 3, 482-488.	11.3	174
31	Tandem Catalysis for CO₂ Hydrogenation to C₂â€“C₄ Hydrocarbons. Nano Letters, 2017, 17, 3798-3802.	9.1	183
32	Evidence of Structure Sensitivity in the Fischerâ€“Tropsch Reaction on Model Cobalt Nanoparticles by Timeâ€Resolved Chemical Transient Kinetics. Angewandte Chemie - International Edition, 2017, 56, 7415-7419.	13.8	44
33	Evidence of Structure Sensitivity in the Fischerâ€“Tropsch Reaction on Model Cobalt Nanoparticles by Timeâ€Resolved Chemical Transient Kinetics. Angewandte Chemie, 2017, 129, 7523-7527.	2.0	5
34	Alcohol Oxidation at Platinumâ€“Gas and Platinumâ€“Liquid Interfaces: The Effect of Platinum Nanoparticle Size, Water Coadsorption, and Alcohol Concentration. Journal of Physical Chemistry C, 2017, 121, 7365-7371.	3.1	18
35	Site-Selective Oxidative Coupling Reactions for the Attachment of Enzymes to Glass Surfaces through DNA-Directed Immobilization. Journal of the American Chemical Society, 2017, 139, 1967-1974.	13.7	39
36	New Insights into Aldol Reactions of Methyl Isocyanoacetate Catalyzed by Heterogenized Homogeneous Catalysts. Nano Letters, 2017, 17, 584-589.	9.1	22

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37	Hydroisomerization of n-Hexane Using Acidified Metalâ€“Organic Framework and Platinum Nanoparticles. Journal of the American Chemical Society, 2017, 139, 12382-12385.	13.7	73
38	Dendrimer-Stabilized Metal Nanoparticles as Efficient Catalysts for Reversible Dehydrogenation/Hydrogenation of N-Heterocycles. Journal of the American Chemical Society, 2017, 139, 18084-18092.	13.7	147
39	Supported Dendrimer-Encapsulated Metal Clusters: Toward Heterogenizing Homogeneous Catalysts. Accounts of Chemical Research, 2017, 50, 1894-1901.	15.6	126
40	Product distribution change in the early stages of carbon monoxide hydrogenation over cobalt magnesium Fischer-Tropsch catalyst. Catalysis Today, 2016, 272, 69-73.	4.4	11
41	Molecular catalysis science: Perspective on unifying the fields of catalysis. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5159-5166.	7.1	85
42	Anisotropic phase segregation and migration of Pt in nanocrystals en route to nanoframe catalysts. Nature Materials, 2016, 15, 1188-1194.	27.5	244
43	In Situ Spectroscopic Investigation into the Active Sites for Crotonaldehyde Hydrogenation at the Pt Nanoparticleâ€“Co₃O₄ Interface. ACS Catalysis, 2016, 6, 7140-7147.	11.2	48
44	Copper Nanocrystals Encapsulated in Zr-based Metalâ€“Organic Frameworks for Highly Selective CO₂ Hydrogenation to Methanol. Nano Letters, 2016, 16, 7645-7649.	9.1	370
45	Metal Nanoparticles Catalyzed Selective Carbonâ€“Carbon Bond Activation in the Liquid Phase. Journal of the American Chemical Society, 2016, 138, 8533-8537.	13.7	37
46	Dissociative Carbon Dioxide Adsorption and Morphological Changes on Cu(100) and Cu(111) at Ambient Pressures. Journal of the American Chemical Society, 2016, 138, 8207-8211.	13.7	94
47	Coâ€“Rh Nanoparticles for the Hydrogenation of Carbon Monoxide: Catalytic Performance Towards Alcohol Production and Ambient Pressure X-Ray Photoelectron Spectroscopy Study. Catalysis Letters, 2016, 146, 1574-1580.	2.6	14
48	Hot Electron Surface Chemistry at Oxideâ€“Metal Interfaces: Foundation of Acid-base Catalysis. Catalysis Letters, 2016, 146, 1-11.	2.6	33
49	Activation of Cu(111) surface by decomposition into nanoclusters driven by CO adsorption. Science, 2016, 351, 475-478.	12.6	245
50	Ambient Pressure X-ray Photoelectron Spectroscopy for Probing Monometallic, Bimetallic and Oxide-Metal Catalysts Under Reactive Atmospheres and Catalytic Reaction Conditions. Topics in Catalysis, 2016, 59, 420-438.	2.8	19
51	Silica-Supported Cationic Gold(I) Complexes as Heterogeneous Catalysts for Regio- and Enantioselective Lactonization Reactions. Journal of the American Chemical Society, 2015, 137, 7083-7086.	13.7	110
52	Chemical Environment Control and Enhanced Catalytic Performance of Platinum Nanoparticles Embedded in Nanocrystalline Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2015, 137, 7810-7816.	13.7	278
53	Atomic Structure of Pt₃Ni Nanoframe Electrocatalysts by in Situ X-ray Absorption Spectroscopy. Journal of the American Chemical Society, 2015, 137, 15817-15824.	13.7	197
54	Atomic Scale Foundation of Covalent and Acidâ€“Base Catalysis in Reaction Selectivity and Turnover Rate. Topics in Catalysis, 2015, 58, 184-189.	2.8	4

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55	Frontispiece: Chemical-Reaction-Induced Hot Electron Flows on Platinum Colloid Nanoparticles under Hydrogen Oxidation: Impact of Nanoparticle Size. Angewandte Chemie - International Edition, 2015, 54, n/a-n/a.	13.8	0
56	Chemicalâ€Reactionâ€Induced Hot Electron Flows on Platinum Colloid Nanoparticles under Hydrogen Oxidation: Impact of Nanoparticle Size. Angewandte Chemie, 2015, 127, 2370-2374.	2.0	8
57	Nanocatalysis II: In Situ Surface Probes of Nano-Catalysts and Correlative Structureâ€“Reactivity Studies. Catalysis Letters, 2015, 145, 249-271.	2.6	35
58	Mesoporous Aluminosilicate Catalysts for the Selective Isomerization of n-Hexane: The Roles of Surface Acidity and Platinum Metal. Journal of the American Chemical Society, 2015, 137, 10231-10237.	13.7	71
59	Reaction of CO with Preadsorbed Oxygen on Low-Index Copper Surfaces: An Ambient Pressure X-ray Photoelectron Spectroscopy and Scanning Tunneling Microscopy Study. Journal of Physical Chemistry C, 2015, 119, 14669-14674.	3.1	43
60	Role of Hot Electrons and Metalâ€“Oxide Interfaces in Surface Chemistry and Catalytic Reactions. Chemical Reviews, 2015, 115, 2781-2817.	47.7	282
61	High-performance hybrid oxide catalyst of manganese and cobalt for low-pressure methanol synthesis. Nature Communications, 2015, 6, 6538.	12.8	135
62	Catalyst Chemical State during CO Oxidation Reaction on Cu(111) Studied with Ambient-Pressure X-ray Photoelectron Spectroscopy and Near Edge X-ray Adsorption Fine Structure Spectroscopy. Journal of the American Chemical Society, 2015, 137, 11186-11190.	13.7	135
63	The Frontiers of Catalysis Science and Future Challenges. Catalysis Letters, 2015, 145, 1-2.	2.6	16
64	Nanocatalysis I: Synthesis of Metal and Bimetallic Nanoparticles and Porous Oxides and Their Catalytic Reaction Studies. Catalysis Letters, 2015, 145, 233-248.	2.6	120
65	Polymer-Encapsulated Metallic Nanoparticles as a Bridge Between Homogeneous and Heterogeneous Catalysis. Catalysis Letters, 2015, 145, 126-138.	2.6	60
66	Hierarchically Nanoporous Zeolites and Their Heterogeneous Catalysis: Current Status and Future Perspectives. Catalysis Letters, 2015, 145, 193-213.	2.6	85
67	Colloidal Metal Nanocatalysts: Synthesis, Characterization, and Catalytic Applications. Journal of Cluster Science, 2014, 25, 83-114.	3.3	58
68	In Situ IR and X-ray High Spatial-Resolution Microspectroscopy Measurements of Multistep Organic Transformation in Flow Microreactor Catalyzed by Au Nanoclusters. Journal of the American Chemical Society, 2014, 136, 3624-3629.	13.7	74
69	Evidence of Highly Active Cobalt Oxide Catalyst for the Fischerâ€“Tropsch Synthesis and CO₂ Hydrogenation. Journal of the American Chemical Society, 2014, 136, 2260-2263.	13.7	211
70	Cobalt Particle Size Effects in the Fischerâ€“Tropsch Synthesis and in the Hydrogenation of CO2 Studied with Nanoparticle Model Catalysts on Silica. Topics in Catalysis, 2014, 57, 500-507.	2.8	64
71	Effects of Nanoparticle Size and Metal/Support Interactions in Pt-Catalyzed Methanol Oxidation Reactions in Gas and Liquid Phases. Catalysis Letters, 2014, 144, 1930-1938.	2.6	34
72	Recovery of Pt Surfaces for Ethylene Hydrogenation-Based Active Site Determination. Catalysis Letters, 2014, 144, 1151-1158.	2.6	9

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73	Structure and Chemical State of the Pt(557) Surface during Hydrogen Oxidation Reaction Studied by in Situ Scanning Tunneling Microscopy and X-ray Photoelectron Spectroscopy. Journal of the American Chemical Society, 2013, 135, 12560-12563.	13.7	25
74	Promotion of Hydrogenation of Organic Molecules by Incorporating Iron into Platinum Nanoparticle Catalysts: Displacement of Inactive Reaction Intermediates. ACS Catalysis, 2013, 3, 2371-2375.	11.2	22
75	Enhanced CO Oxidation Rates at the Interface of Mesoporous Oxides and Pt Nanoparticles. Journal of the American Chemical Society, 2013, 135, 16689-16696.	13.7	361
76	Concluding remarks. Faraday Discussions, 2013, 162, 395.	3.2	0
77	Preparation of mesoporous oxides and their support effects on Pt nanoparticle catalysts in catalytic hydrogenation of furfural. Journal of Colloid and Interface Science, 2013, 392, 122-128.	9.4	90
78	Influence of Size-Induced Oxidation State of Platinum Nanoparticles on Selectivity and Activity in Catalytic Methanol Oxidation in the Gas Phase. Nano Letters, 2013, 13, 2976-2979.	9.1	99
79	Investigations of Structure Sensitivity in Heterogeneous Catalysis: From Single Crystals to Monodisperse Nanoparticles. Topics in Catalysis, 2013, 56, 1277-1283.	2.8	42
80	Isomerization of n-Hexane Catalyzed by Supported Monodisperse PtRh Bimetallic Nanoparticles. Catalysis Letters, 2013, 143, 907-911.	2.6	20
81	The Role of an Organic Cap in Nanoparticle Catalysis: Reversible Restructuring of Carbonaceous Material Controls Catalytic Activity of Platinum Nanoparticles for Ethylene Hydrogenation and Methanol Oxidation. Catalysis Letters, 2012, 142, 1286-1294.	2.6	53
82	Sum Frequency Generation Vibrational Spectroscopy of Colloidal Platinum Nanoparticle Catalysts: Disordering versus Removal of Organic Capping. Journal of Physical Chemistry C, 2012, 116, 17540-17546.	3.1	40
83	Furfuraldehyde Hydrogenation on Titanium Oxide-Supported Platinum Nanoparticles Studied by Sum Frequency Generation Vibrational Spectroscopy: Acidâ€“Base Catalysis Explains the Molecular Origin of Strong Metalâ€“Support Interactions. Journal of the American Chemical Society, 2012, 134, 14208-14216.	13.7	198
84	Adsorption of Amino Acids and Dipeptides to the Hydrophobic Polystyrene Interface Studied by SFG and QCM: The Special Case of Phenylalanine. Journal of Physical Chemistry C, 2012, 116, 9947-9954.	3.1	24
85	In Situ Surface and Reaction Probe Studies with Model Nanoparticle Catalysts. ACS Catalysis, 2012, 2, 2250-2258.	11.2	40
86	Size and Shape Control of Metal Nanoparticles for Reaction Selectivity in Catalysis. ChemCatChem, 2012, 4, 1512-1524.	3.7	467
87	High Structure Sensitivity of Vapor-Phase Furfural Decarbonylation/Hydrogenation Reaction Network as a Function of Size and Shape of Pt Nanoparticles. Nano Letters, 2012, 12, 5196-5201.	9.1	184
88	Formation of Nanometer-Sized Surface Platinum Oxide Clusters on a Stepped Pt(557) Single Crystal Surface Induced by Oxygen: A High-Pressure STM and Ambient-Pressure XPS Study. Nano Letters, 2012, 12, 1491-1497.	9.1	95
89	Monodisperse Metal Nanoparticle Catalysts: Synthesis, Characterizations, and Molecular Studies Under Reaction Conditions. Topics in Catalysis, 2012, 55, 1257-1275.	2.8	31
90	Reforming of C6 Hydrocarbons Over Model Pt Nanoparticle Catalysts. Topics in Catalysis, 2012, 55, 723-730.	2.8	19

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91	A Pt-Cluster-Based Heterogeneous Catalyst for Homogeneous Catalytic Reactions: X-ray Absorption Spectroscopy and Reaction Kinetic Studies of Their Activity and Stability against Leaching. Journal of the American Chemical Society, 2011, 133, 13527-13533.	13.7	94
92	An SFG Study of Interfacial Amino Acids at the Hydrophilic SiO₂ and Hydrophobic Deuterated Polystyrene Surfaces. Journal of the American Chemical Society, 2011, 133, 6243-6253.	13.7	46
93	Spectroscopic Study of Platinum and Rhodium Dendrimer (PAMAM G4OH) Compounds: Structure and Stability. Journal of Physical Chemistry C, 2011, 115, 4757-4767.	3.1	68
94	Impact of surface chemistry. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 917-924.	7.1	198
95	Rh1â^'x Pd x Nanoparticle Composition Dependence in CO Oxidation by NO. Catalysis Letters, 2011, 141, 235-241.	2.6	30
96	Surface Composition and Catalytic Evolution of Au x Pd1â^'x (xÂ=Â0.25, 0.50 and 0.75) Nanoparticles Under CO/O2 Reaction in Torr Pressure Regime and at 200ÂÂ°C. Catalysis Letters, 2011, 141, 633-640.	2.6	63
97	CO2 Hydrogenation Studies on Co and CoPt Bimetallic Nanoparticles Under Reaction Conditions Using TEM, XPS and NEXAFS. Topics in Catalysis, 2011, 54, 778-785.	2.8	103
98	Determination of Molecular Surface Structure, Composition, and Dynamics under Reaction Conditions at High Pressures and at the Solidâ€"Liquid Interface. Angewandte Chemie - International Edition, 2011, 50, 10116-10129.	13.8	45
99	Structure Effects on Pyridine Hydrogenation over Pt(111) and Pt(100) Studied with Sum Frequency Generation Vibrational Spectroscopy. Catalysis Letters, 2010, 137, 118-122.	2.6	18
100	Major Successes of Theory-and-Experiment-Combined Studies in Surface Chemistry and Heterogeneous Catalysis. Topics in Catalysis, 2010, 53, 311-325.	2.8	45
101	Selective Nanocatalysis of Organic Transformation by Metals: Concepts, Model Systems, and Instruments. Topics in Catalysis, 2010, 53, 832-847.	2.8	60
102	Rh Thin-Film Nanocatalysts as Chemical Sensors â€" The Hot Electron Effect. Journal of Physical Chemistry C, 2010, 114, 17660-17664.	3.1	23
103	Break-Up of Stepped Platinum Catalyst Surfaces by High CO Coverage. Science, 2010, 327, 850-853.	12.6	456
104	Molecular Studies of Model Surfaces of Metals from Single Crystals to Nanoparticles under Catalytic Reaction Conditions. Evolution from Prenatal and Postmortem Studies of Catalysts. Langmuir, 2010, 26, 16190-16203.	3.5	54
105	Size Effect of Ruthenium Nanoparticles in Catalytic Carbon Monoxide Oxidation. Nano Letters, 2010, 10, 2709-2713.	9.1	379
106	Dependence of Gas-Phase Crotonaldehyde Hydrogenation Selectivity and Activity on the Size of Pt Nanoparticles (1.7â€"7.1Ânm) Supported on SBA-15. Catalysis Letters, 2009, 128, 1-8.	2.6	82
107	Heinz Heinemann. The Berkeley Years (1978â€"1993). Catalysis Letters, 2009, 133, 232-233.	2.6	0
108	Heinz Heinemannâ€™s Legacy at ExxonMobil: An Illustrious Career in Industrial Catalysis. Catalysis Letters, 2009, 133, 227.	2.6	7

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109	The Role of Organic Capping Layers of Platinum Nanoparticles in Catalytic Activity of CO Oxidation. Catalysis Letters, 2009, 129, 1-6.	2.6	159
110	Reaction selectivity in heterogeneous catalysis. Reaction Kinetics and Catalysis Letters, 2009, 96, 191-208.	0.6	77
111	Sum Frequency Generation and Catalytic Reaction Studies of the Removal of Organic Capping Agents from Pt Nanoparticles by UVâˆ'Ozone Treatment. Journal of Physical Chemistry C, 2009, 113, 6150-6155.	3.1	254
112	Advancing the Frontiers in Nanocatalysis, Biointerfaces, and Renewable Energy Conversion by Innovations of Surface Techniques. Journal of the American Chemical Society, 2009, 131, 16589-16605.	13.7	494
113	Compensation Effect of Benzene Hydrogenation on Pt(111) and Pt(100) Analyzed by the Selective Energy Transfer Model. Catalysis Letters, 2008, 121, 173-178.	2.6	14
114	Preparation of size-tunable, highly monodisperse PVP-protected Pt-nanoparticles by seed-mediated growth. Journal of Nanoparticle Research, 2008, 10, 1063-1069.	1.9	91
115	The 13th International Symposium on Relations Between Homogeneous and Heterogeneous Catalysisâ€"An Introduction. Topics in Catalysis, 2008, 48, 1-7.	2.8	16
116	Colloid Science of Metal Nanoparticle Catalysts in 2D and 3D Structures. Challenges of Nucleation, Growth, Composition, Particle Shape, Size Control and Their Influence on Activity and Selectivity. Topics in Catalysis, 2008, 49, 126-135.	2.8	267
117	Molecular Factors of Catalytic Selectivity. Angewandte Chemie - International Edition, 2008, 47, 9212-9228.	13.8	436
118	Molecular surface chemistry by metal single crystals and nanoparticles from vacuum to high pressure. Chemical Society Reviews, 2008, 37, 2155.	38.1	159
119	Sum Frequency Generation Vibrational Spectroscopy of Pyridine Hydrogenation on Platinum Nanoparticles. Journal of Physical Chemistry C, 2008, 112, 11865-11868.	3.1	38
120	Evolution of the surface science of catalysis from single crystals to metal nanoparticles under pressure. Journal of Chemical Physics, 2008, 128, 182504.	3.0	61
121	The effects of oxygen plasma on the chemical composition and morphology of the Ru capping layer of the extreme ultraviolet mask blanks. Journal of Vacuum Science & Technology B, 2008, 26, 2225-2229.	1.3	13
122	Charge-Transfer Interaction of Poly(vinylpyrrolidone) with Platinum and Rhodium Nanoparticles. Journal of Physical Chemistry C, 2007, 111, 6288-6295.	3.1	181
123	Side Chain, Chain Length, and Sequence Effects on Amphiphilic Peptide Adsorption at Hydrophobic and Hydrophilic Surfaces Studied by Sum-Frequency Generation Vibrational Spectroscopy and Quartz Crystal Microbalance. Journal of Physical Chemistry C, 2007, 111, 255-261.	3.1	95
124	The evolution of model catalytic systems; studies of structure, bonding and dynamics from single crystal metal surfaces to nanoparticles, and from low pressure (<10âˆ'3Torr) to high pressure (>10âˆ'3Torr) to liquid interfaces. Physical Chemistry Chemical Physics, 2007, 9, 3500-3513.	2.8	152
125	Peptides Adsorbed on Hydrophobic Surfacesâ€"A Sum Frequency Generation Vibrational Spectroscopy and Modeling Study. Israel Journal of Chemistry, 2007, 47, 51-58.	2.3	33
126	The genesis and importance of oxideâ€"metal interface controlled heterogeneous catalysis; the catalytic nanodiode. Topics in Catalysis, 2007, 46, 217-222.	2.8	69

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127	Pre-prepared platinum nanoparticles supported on SBA-15 â€“ preparation, pretreatment conditions and catalytic properties. Catalysis Letters, 2007, 113, 19-28.	2.6	27
128	The impact of surface science on the commercialization of chemical processes. Catalysis Letters, 2007, 115, 87-98.	2.6	51
129	Clusters, surfaces, and catalysis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10577-10583.	7.1	239
130	Dynamics of Surface Catalyzed Reactions; the Roles of Surface Defects, Surface Diffusion, and Hot Electronsâ€. Journal of Physical Chemistry B, 2006, 110, 20014-20022.	2.6	61
131	Scanning Tunneling Microscopy (STM) at High Pressures. Adsorption and Catalytic Reaction Studies on Platinum and Rhodium Single Crystal Surfaces. Catalysis Letters, 2006, 107, 131-141.	2.6	22
132	Structure, reactivity, and mobility of carbonaceous overlayers during olefin hydrogenation on platinum and rhodium single crystal surfaces. Topics in Catalysis, 2005, 34, 121-128.	2.8	22
133	The catalytic nanodiode. Its role in catalytic reaction mechanisms in a historical perspective. Catalysis Letters, 2005, 101, 1-3.	2.6	27
134	Combined Atomic Force Microscopy and Sum Frequency Generation Vibrational Spectroscopy Studies of Polyolefins and Hydrogels at Interfaces. ACS Symposium Series, 2005, , 112-132.	0.5	1
135	Active sites and states in the heterogeneous catalysis of carbonâ€“hydrogen bonds. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2005, 363, 879-900.	3.4	28
136	Sum Frequency Generation Vibrational Spectroscopy Characterization of Surface Monolayers: Catalytic Reaction Intermediates and Polymer Surfaces. E-Journal of Surface Science and Nanotechnology, 2004, 2, 106-118.	0.4	3
137	Fabrication of Two-Dimensional and Three-Dimensional Platinum Nanoparticle Systems for Chemisorption and Catalytic Reaction Studies. ACS Symposium Series, 2004, , 210-219.	0.5	6
138	On the move. Nature, 2004, 430, 730-730.	27.8	36
139	Solvent- and interface-induced surface segregation in blends of isotactic polypropylene with poly(ethylene-co-propylene) rubber. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 421-432.	2.1	8
140	High Pressure Scanning Tunneling Microscopy Study of CO Poisoning of Ethylene Hydrogenation on Pt(111) and Rh(111) Single Crystals. Journal of Physical Chemistry B, 2004, 108, 13300-13306.	2.6	77
141	Synthetic Insertion of Gold Nanoparticles into Mesoporous Silica. Chemistry of Materials, 2003, 15, 1242-1248.	6.7	175
142	Fabrication of Sub-10-nm Silicon Nanowire Arrays by Size Reduction Lithography. Journal of Physical Chemistry B, 2003, 107, 3340-3343.	2.6	169
143	Detection of Immobilized Protein on Latex Microspheres by IRâˆ’Visible Sum Frequency Generation and Scanning Force Microscopy. Langmuir, 2003, 19, 3563-3566.	3.5	31
144	An in Situ Time-Dependent Study of CO Oxidation on Pt(111) in Aqueous Solution by Voltammetry and Sum Frequency Generation. Journal of Physical Chemistry B, 2003, 107, 1840-1844.	2.6	50

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145	In-SituObservation of Ï€-Allylc-C6H9Intermediate during High-Pressure Cyclohexene Catalytic Reactions on Pt(111) Using Sum Frequency Generation Vibrational Spectroscopy. Journal of Physical Chemistry B, 2003, 107, 5267-5272.	2.6	39
146	Encapsulation of Metal (Au, Ag, Pt) Nanoparticles into the Mesoporous SBA-15 Structure. Langmuir, 2003, 19, 4396-4401.	3.5	163
147	The Role of Carbon Deposition from CO Dissociation on Platinum Crystal Surfaces during Catalytic CO Oxidation:â€‰ Effects on Turnover Rate, Ignition Temperature, and Vibrational Spectra. Journal of Physical Chemistry B, 2002, 106, 10854-10863.	2.6	76
148	Surface Segregation of Methyl Side Branches Monitored by Sum Frequency Generation (SFG) Vibrational Spectroscopy for a Series of Random Poly(ethylene-co-propylene) Copolymers. Journal of Physical Chemistry B, 2002, 106, 5212-5220.	2.6	47
149	Nanocrystal Templating of Silica Mesopores with Tunable Pore Sizes. Nano Letters, 2002, 2, 907-910.	9.1	84
150	Surface science studies of Ziegler-Natta olefin polymerization system: Correlations between polymerization kinetics, polymer structures, and active site structures on model catalysts. Korean Journal of Chemical Engineering, 2002, 19, 1-10.	2.7	15
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