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	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
2	Size and Shape Control of Metal Nanoparticles for Reaction Selectivity in Catalysis. ChemCatChem, 2012, 4, 1512-1524.	3.7	467
3	Break-Up of Stepped Platinum Catalyst Surfaces by High CO Coverage. Science, 2010, 327, 850-853.	12.6	456
4	Molecular Factors of Catalytic Selectivity. Angewandte Chemie - International Edition, 2008, 47, 9212-9228.	13.8	436
5	Ethylene Hydrogenation on Pt(111) Monitored in Situ at High Pressures Using Sum Frequency Generation. Journal of the American Chemical Society, 1996, 118, 2942-2949.	13.7	421
6	Size Effect of Ruthenium Nanoparticles in Catalytic Carbon Monoxide Oxidation. Nano Letters, 2010, 10, 2709-2713.	9.1	379
7	Surface Science Approach to Modeling Supported Catalysts. Catalysis Reviews - Science and Engineering, 1997, 39, 77-168.	12.9	374
8	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
9	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
10	Bioinspired Metalâ€“Organic Framework Catalysts for Selective Methane Oxidation to Methanol. Journal of the American Chemical Society, 2018, 140, 18208-18216.	13.7	301
11	Modern Surface Science and Surface Technologies:Â An Introduction. Chemical Reviews, 1996, 96, 1223-1236.	47.7	292
12	Role of Hot Electrons and Metalâ€“Oxide Interfaces in Surface Chemistry and Catalytic Reactions. Chemical Reviews, 2015, 115, 2781-2817.	47.7	282
13	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
14	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
15	Sum Frequency Generation and Catalytic Reaction Studies of the Removal of Organic Capping Agents from Pt Nanoparticles by UVâ^'Ozone Treatment. Journal of Physical Chemistry C, 2009, 113, 6150-6155.	3.1	254
16	Activation of Cu(111) surface by decomposition into nanoclusters driven by CO adsorption. Science, 2016, 351, 475-478.	12.6	245
17	Anisotropic phase segregation and migration of Pt in nanocrystals en route to nanoframe catalysts. Nature Materials, 2016, 15, 1188-1194.	27.5	244
18	Clusters, surfaces, and catalysis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10577-10583.	7.1	239

#	Article	IF	Citations
19	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
20	Impact of surface chemistry. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 917-924.	7.1	198
21	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
22	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
23	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
24	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
25	Tandem Catalysis for CO₂ Hydrogenation to C₂â€“C₄ Hydrocarbons. Nano Letters, 2017, 17, 3798-3802.	9.1	183
26	Charge-Transfer Interaction of Poly(vinylpyrrolidone) with Platinum and Rhodium Nanoparticles. Journal of Physical Chemistry C, 2007, 111, 6288-6295.	3.1	181
27	Surface-Induced Ferroelectric Ice on Pt(111). Physical Review Letters, 1998, 80, 1533-1536.	7.8	179
28	Synthetic Insertion of Gold Nanoparticles into Mesoporous Silica. Chemistry of Materials, 2003, 15, 1242-1248.	6.7	175
29	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
30	Fabrication of Sub-10-nm Silicon Nanowire Arrays by Size Reduction Lithography. Journal of Physical Chemistry B, 2003, 107, 3340-3343.	2.6	169
31	Encapsulation of Metal (Au, Ag, Pt) Nanoparticles into the Mesoporous SBA-15 Structure. Langmuir, 2003, 19, 4396-4401.	3.5	163
32	Molecular surface chemistry by metal single crystals and nanoparticles from vacuum to high pressure. Chemical Society Reviews, 2008, 37, 2155.	38.1	159
33	The Role of Organic Capping Layers of Platinum Nanoparticles in Catalytic Activity of CO Oxidation. Catalysis Letters, 2009, 129, 1-6.	2.6	159
34	The evolution of model catalytic systems; studies of structure, bonding and dynamics from single crystal metal surfaces to nanoparticles, and from low pressure (<10â^'3Torr) to high pressure (>10â^'3Torr) to liquid interfaces. Physical Chemistry Chemical Physics, 2007, 9, 3500-3513.	2.8	152
35	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
36	High-performance hybrid oxide catalyst of manganese and cobalt for low-pressure methanol synthesis. Nature Communications, 2015, 6, 6538.	12.8	135

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37	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
38	Foundations and strategies of the construction of hybrid catalysts for optimized performances. Nature Catalysis, 2018, 1, 318-325.	34.4	133
39	Supported Dendrimer-Encapsulated Metal Clusters: Toward Heterogenizing Homogeneous Catalysts. Accounts of Chemical Research, 2017, 50, 1894-1901.	15.6	126
40	Reproducibility of Turnover Rates in Heterogeneous Metal Catalysis: Compilation of Data and Guidelines for Data Analysis. Catalysis Reviews - Science and Engineering, 1997, 39, 49-76.	12.9	125
41	Pressure Dependence (10â˜'10â€"700 Torr) of the Vibrational Spectra of Adsorbed CO on Pt(111) Studied by Sum Frequency Generation. Physical Review Letters, 1996, 77, 3858-3860.	7.8	122
42	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
43	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
44	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
45	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
46	Thermal and Chemical Stability and Adhesion Strength of Pt Nanoparticle Arrays Supported on Silica Studied by Transmission Electron Microscopy and Atomic Force Microscopy. Journal of Physical Chemistry B, 2000, 104, 7286-7292.	2.6	104
47	Model Catalysts Fabricated Using Electron Beam Lithography and Pulsed Laser Deposition. Journal of Physical Chemistry B, 1997, 101, 9973-9977.	2.6	103
48	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
49	SFG-surface vibrational spectroscopy studies of structure sensitivity and insensitivity in catalytic reactions: cyclohexene dehydrogenation and ethylene hydrogenation on Pt (1 1 1) and Pt (1 0 0) crystal surfaces. Journal of Molecular Catalysis A, 2000, 163, 43-53.	4.8	101
50	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
51	Selective CO2 electrocatalysis at the pseudocapacitive nanoparticle/ordered-ligand interlayer. Nature Energy, 2020, 5, 1032-1042.	39.5	99
52	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
53	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
54	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

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55	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
56	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
57	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
58	Hierarchically Nanoporous Zeolites and Their Heterogeneous Catalysis: Current Status and Future Perspectives. Catalysis Letters, 2015, 145, 193-213.	2.6	85
59	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
60	Nanocrystal Templating of Silica Mesopores with Tunable Pore Sizes. Nano Letters, 2002, 2, 907-910.	9.1	84
61	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
62	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
63	Reaction selectivity in heterogeneous catalysis. Reaction Kinetics and Catalysis Letters, 2009, 96, 191-208.	0.6	77
64	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
65	Title is missing!. Catalysis Letters, 2002, 81, 137-140.	2.6	76
66	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
67	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
68	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
69	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
70	The genesis and importance of oxideâ€“metal interface controlled heterogeneous catalysis; the catalytic nanodiode. Topics in Catalysis, 2007, 46, 217-222.	2.8	69
71	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
72	The Flexible Surface: Molecular Studies Explain the Extraordinary Diversity of Surface Chemical Properties. Journal of Chemical Education, 1998, 75, 161.	2.3	65

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73	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
74	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
75	Specific Metalâ€“Support Interactions between Nanoparticle Layers for Catalysts with Enhanced Methanol Oxidation Activity. ACS Catalysis, 2018, 8, 5391-5398.	11.2	63
76	Reactions on single-crystal surfaces. Accounts of Chemical Research, 1976, 9, 248-256.	15.6	62
77	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
78	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
79	Selective Nanocatalysis of Organic Transformation by Metals: Concepts, Model Systems, and Instruments. Topics in Catalysis, 2010, 53, 832-847.	2.8	60
80	Polymer-Encapsulated Metallic Nanoparticles as a Bridge Between Homogeneous and Heterogeneous Catalysis. Catalysis Letters, 2015, 145, 126-138.	2.6	60
81	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
82	A mini review of cobalt-based nanocatalyst in Fischer-Tropsch synthesis. Applied Catalysis A: General, 2020, 602, 117701.	4.3	60
83	Preparation and structure of 1â€“8 monolayer thick epitaxial iron oxide films grown on Pt(111). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1993, 11, 2138-2144.	2.1	59
84	The Development of Molecular Surface Science and the Surface Science of Catalysis:Â The Berkeley Contributionâ€. Journal of Physical Chemistry B, 2000, 104, 2969-2979.	2.6	59
85	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
86	High pressure, high temperature scanning tunneling microscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1999, 17, 1080.	1.6	58
87	Colloidal Metal Nanocatalysts: Synthesis, Characterization, and Catalytic Applications. Journal of Cluster Science, 2014, 25, 83-114.	3.3	58
88	The Methanol Economy: Methane and Carbon Dioxide Conversion. Topics in Catalysis, 2018, 61, 530-541.	2.8	58
89	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
90	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

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91	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
92	The impact of surface science on the commercialization of chemical processes. Catalysis Letters, 2007, 115, 87-98.	2.6	51
93	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
94	Metallic Nanoparticles in Heterogeneous Catalysis. Catalysis Letters, 2021, 151, 2153.	2.6	50
95	Title is missing!. Topics in Catalysis, 2000, 13, 33-41.	2.8	49
96	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
97	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
98	Activation of Tungsten Oxide for Propane Dehydrogenation and Its High Catalytic Activity and Selectivity. Catalysis Letters, 2017, 147, 622-632.	2.6	47
99	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
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	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
102	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
103	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
104	Investigations of Structure Sensitivity in Heterogeneous Catalysis: From Single Crystals to Monodisperse Nanoparticles. Topics in Catalysis, 2013, 56, 1277-1283.	2.8	42
105	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
106	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
107	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
108	In Situ Surface and Reaction Probe Studies with Model Nanoparticle Catalysts. ACS Catalysis, 2012, 2, 2250-2258.	11.2	40

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109	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
110	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
111	Sum Frequency Generation Vibrational Spectroscopy of Pyridine Hydrogenation on Platinum Nanoparticles. Journal of Physical Chemistry C, 2008, 112, 11865-11868.	3.1	38
112	Title is missing!. Topics in Catalysis, 1999, 8, 23-34.	2.8	37
113	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
114	On the move. Nature, 2004, 430, 730-730.	27.8	36
115	Nanocatalysis II: In Situ Surface Probes of Nano-Catalysts and Correlative Structureâ€“Reactivity Studies. Catalysis Letters, 2015, 145, 249-271.	2.6	35
116	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
117	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
118	Hot Electron Surface Chemistry at Oxideâ€“Metal Interfaces: Foundation of Acid-base Catalysis. Catalysis Letters, 2016, 146, 1-11.	2.6	33
119	Nanoparticle Assembly Induced Ligand Interactions for Enhanced Electrocatalytic CO₂ Conversion. Journal of the American Chemical Society, 2021, 143, 19919-19927.	13.7	32
120	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
121	Monodisperse Metal Nanoparticle Catalysts: Synthesis, Characterizations, and Molecular Studies Under Reaction Conditions. Topics in Catalysis, 2012, 55, 1257-1275.	2.8	31
122	Rh1âˆ’x Pd x Nanoparticle Composition Dependence in CO Oxidation by NO. Catalysis Letters, 2011, 141, 235-241.	2.6	30
123	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
124	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
125	The catalytic nanodiode. Its role in catalytic reaction mechanisms in a historical perspective. Catalysis Letters, 2005, 101, 1-3.	2.6	27
126	Pre-prepared platinum nanoparticles supported on SBA-15 â€“ preparation, pretreatment conditions and catalytic properties. Catalysis Letters, 2007, 113, 19-28.	2.6	27

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127	The interaction of short-chain model lubricants with the surfaces of hydrogenated amorphous carbon films. Tribology Letters, 1995, 1, 47-58.	2.6	26
128	Title is missing!. Topics in Catalysis, 2000, 10, 107-113.	2.8	25
129	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
130	Reaction layer formation and fracture at chemically vapor deposited diamond/metal interfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1994, 12, 1513-1518.	2.1	24
131	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
132	Rh Thin-Film Nanocatalysts as Chemical Sensors â€" The Hot Electron Effect. Journal of Physical Chemistry C, 2010, 114, 17660-17664.	3.1	23
133	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
134	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
135	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
136	New Insights into Aldol Reactions of Methyl Isocyanoacetate Catalyzed by Heterogenized Homogeneous Catalysts. Nano Letters, 2017, 17, 584-589.	9.1	22
137	Combined surface characterization and tribological (friction and wear) studies of CVD diamond films. Journal of Materials Research, 1993, 8, 2577-2586.	2.6	21
138	Isomerization of n-Hexane Catalyzed by Supported Monodisperse PtRh Bimetallic Nanoparticles. Catalysis Letters, 2013, 143, 907-911.	2.6	20
139	Adhesion and friction properties of hydrogenated amorphous carbon films measured by atomic force microscopy. Tribology Letters, 1995, 1, 233.	2.6	19
140	Reforming of C6 Hydrocarbons Over Model Pt Nanoparticle Catalysts. Topics in Catalysis, 2012, 55, 723-730.	2.8	19
141	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
142	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
143	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
144	Title is missing!. Catalysis Letters, 2000, 68, 7-11.	2.6	16

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145	The 13th International Symposium on Relations Between Homogeneous and Heterogeneous Catalysisâ€"An Introduction. Topics in Catalysis, 2008, 48, 1-7.	2.8	16
146	The Frontiers of Catalysis Science and Future Challenges. Catalysis Letters, 2015, 145, 1-2.	2.6	16
147	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
148	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
149	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
150	Title is missing!. Catalysis Letters, 2000, 66, 5-11.	2.6	14
151	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
152	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
153	The Surface Chemical Bond. Angewandte Chemie International Edition in English, 1977, 16, 92-99.	4.4	13
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