

Richard I Masel

List of Publications by Year in descending order

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papers

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273
all docs

273
docs citations

273
times ranked

13471
citing authors

#	ARTICLE	IF	CITATIONS
1	An industrial perspective on catalysts for low-temperature CO ₂ electrolysis. Nature Nanotechnology, 2021, 16, 118-128.	31.5	255
2	Performance and long-term stability of CO ₂ conversion to formic acid using a three-compartment electrolyzer design. Journal of CO ₂ Utilization, 2020, 42, 101349.	6.8	57
3	A Review of the Use of Immobilized Ionic Liquids in the Electrochemical Conversion of CO ₂ . Journal of Carbon Research, 2020, 6, 33.	2.7	13
4	CO ₂ Electrolysis to CO and O ₂ at High Selectivity, Stability and Efficiency Using Sustainion Membranes. Journal of the Electrochemical Society, 2018, 165, J3371-J3377.	2.9	179
5	Carbon Dioxide and Water Electrolysis Using New Alkaline Stable Anion Membranes. Frontiers in Chemistry, 2018, 6, 263.	3.6	173
6	Alkaline Stable Sustainion® Anion Exchange Membrane for Fuel Cells. ECS Meeting Abstracts, 2018, , .	0.0	0
7	The Effect of Cathode Catalyst on the Performance of Anion Exchange Membrane Water Electrolyzer. ECS Meeting Abstracts, 2018, , .	0.0	0
8	Electrochemical conversion of CO ₂ to formic acid utilizing Sustainion® membranes. Journal of CO ₂ Utilization, 2017, 20, 208-217.	6.8	227
9	Sustainion Imidazolium-Functionalized Polymers for Carbon Dioxide Electrolysis. Energy Technology, 2017, 5, 929-936.	3.8	284
10	CO ₂ Conversion to Formic Acid in a Three Compartment Cell with Sustainion® Membranes. ECS Transactions, 2017, 77, 1425-1431.	0.5	36
11	Imidazolium-Functionalized Polymer Membranes for Fuel Cells and Electrolyzers. ECS Transactions, 2017, 80, 945-956.	0.5	8
12	Tunable-High Performance Sustainion® Anion Exchange Membranes for Electrochemical Applications. ECS Transactions, 2017, 77, 1653-1656.	0.5	15
13	The effect of membrane on an alkaline water electrolyzer. International Journal of Hydrogen Energy, 2017, 42, 29661-29665.	7.1	132
14	A High Performing Zero Gap Alkaline Electrolyzer. ECS Meeting Abstracts, 2017, , .	0.0	1
15	Factors That Limit the Performance of CO ₂ Electrolyzers. ECS Meeting Abstracts, 2017, , .	0.0	0
16	CO ₂ Conversion to Formic Acid in a Three Compartment Cell with Sustainion® Membranes. ECS Meeting Abstracts, 2017, , .	0.0	0
17	Electrochemical generation of syngas from water and carbon dioxide at industrially important rates. Journal of CO ₂ Utilization, 2016, 15, 50-56.	6.8	76
18	The effect of electrolyte composition on the electroreduction of CO ₂ to CO on Ag based gas diffusion electrodes. Physical Chemistry Chemical Physics, 2016, 18, 7075-7084.	2.8	367

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19	Anion Exchange Membrane Electrolyzers Showing 1 A/cm ² at Less Than 2 V. ECS Meeting Abstracts, 2016, , .	0.0	0
20	(Invited) CO ₂ Electrolysis for Syngas Production. ECS Meeting Abstracts, 2016, , .	0.0	0
21	Unlocking the Potential of CO ₂ Conversion to Fuels and Chemicals as an Economically Viable Route to CCR. Energy Procedia, 2014, 63, 7959-7962.	1.8	16
22	Mechanical Activation of CaO-Based Adsorbents for CO ₂ Capture. ChemSusChem, 2013, 6, 193-198.	6.8	51
23	Monolayers of choline chloride can enhance desired electrochemical reactions and inhibit undesirable ones. Electrochimica Acta, 2013, 96, 18-22.	5.2	8
24	Water Enhancement of CO ₂ Conversion on Silver in 1-Ethyl-3-Methylimidazolium Tetrafluoroborate. Journal of the Electrochemical Society, 2013, 160, H138-H141.	2.9	122
25	An acetylcholinesterase-inspired biomimetic toxicity sensor. Chemosphere, 2013, 91, 1176-1182.	8.2	13
26	Nanoparticle Silver Catalysts That Show Enhanced Activity for Carbon Dioxide Electrolysis. Journal of Physical Chemistry C, 2013, 117, 1627-1632.	3.1	369
27	Chemical sensors based on randomly stacked graphene flakes. Applied Physics Letters, 2012, 100, .	3.3	49
28	In Situ Spectroscopic Examination of a Low Overpotential Pathway for Carbon Dioxide Conversion to Carbon Monoxide. Journal of Physical Chemistry C, 2012, 116, 15307-15312.	3.1	230
29	Nanotubes throw their heat around. Nature Nanotechnology, 2012, 7, 280-281.	31.5	3
30	Synthesis and characterization of a zinc metal-organic framework with chiral nano-pores. CrystEngComm, 2012, 14, 5145.	2.6	18
31	Integrated micro fuel cell with on-demand hydrogen production and passive control MEMS. Microfluidics and Nanofluidics, 2012, 12, 735-749.	2.2	5
32	Polycrystalline Graphene Ribbons as Chemiresistors. Advanced Materials, 2012, 24, 53-57.	21.0	177
33	Graphene Sensors: Polycrystalline Graphene Ribbons as Chemiresistors (Adv. Mater. 1/2012). Advanced Materials, 2012, 24, 52-52.	21.0	2
34	Fast carbon nanotube detectors for micro gas chromatographs. Nanoscale, 2011, 3, 3097.	5.6	12
35	Ionic Liquid-Mediated Selective Conversion of CO ₂ to CO at Low Overpotentials. Science, 2011, 334, 643-644.	12.6	1,293
36	On the Sensing Mechanism in Carbon Nanotube Chemiresistors. ACS Nano, 2011, 5, 153-158.	14.6	91

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37	Non-biological inhibition-based sensing (NIBS) demonstrated for the detection of toxic arsenic compounds. <i>Chemosphere</i> , 2011, 82, 1644-1648.	8.2	1
38	Superior Formic Acid Oxidation Using Carbon Nanotube-Supported Palladium Catalysts. <i>Journal of Physical Chemistry C</i> , 2011, 115, 19413-19418.	3.1	51
39	Synthesis, Characterization, and Photoactivity of Ta ₂ O ₅ -Grafted SiO ₂ Nanoparticles. <i>Chemistry - A European Journal</i> , 2011, 17, 7685-7693.	3.3	8
40	Electrochemical multiphase microsensors for detection of organophosphates. <i>Journal of Micromechanics and Microengineering</i> , 2011, 21, 015006.	2.6	0
41	Optimization of a multiphase sensor for detection of phosphonates in air. <i>AIChE Journal</i> , 2010, 56, 241-247.	3.6	1
42	The fabrication of all-silicon micro gas chromatography columns using gold diffusion eutectic bonding. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 015002.	2.6	23
43	Trends in the Adsorption of Volatile Organic Compounds in a Large-Pore Metal-Organic Framework, IRMOF-1. <i>Langmuir</i> , 2010, 26, 11319-11329.	3.5	78
44	Performance of the direct formic acid fuel cell with electrochemically modified palladium-antimony anode catalyst. <i>Electrochimica Acta</i> , 2010, 55, 2477-2481.	5.2	45
45	Robust fabrication of selective and reversible polymer coated carbon nanotube-based gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2010, 148, 315-322.	7.8	19
46	Effects of Nafion loading in anode catalyst inks on the miniature direct formic acid fuel cell. <i>Journal of Power Sources</i> , 2010, 195, 6405-6410.	7.8	24
47	An enhanced microfluidic control system for improving power density of a hydride-based micro fuel cell. <i>Journal of Power Sources</i> , 2010, 195, 1866-1871.	7.8	18
48	The effect of microcolumn geometry on the performance of micro-gas chromatography columns for chip scale gas analyzers. <i>Sensors and Actuators B: Chemical</i> , 2010, 150, 456-464.	7.8	67
49	An inorganic-organic proton exchange membrane for fuel cells with a controlled nanoscale pore structure. <i>Nature Nanotechnology</i> , 2010, 5, 230-236.	31.5	145
50	The role of defects on the performance of nanotube chemiresistors. , 2010, , .		0
51	Sensitivity of nanotube chemical sensors at the onset of Poole-Frenkel conduction. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	30
52	Enhancing the stability of metal-organic frameworks in humid air by incorporating water repellent functional groups. <i>Chemical Communications</i> , 2010, 46, 6120.	4.1	199
53	Nonthermal Current-Stimulated Desorption of Gases from Carbon Nanotubes. <i>Science</i> , 2010, 329, 1327-1330.	12.6	47
54	Effects of Molecular Sieving and Electrostatic Enhancement in the Adsorption of Organic Compounds on the Zeolitic Imidazolate Framework ZIF-8. <i>Langmuir</i> , 2010, 26, 15625-15633.	3.5	105

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55	Effects of the Addition of Antimony, Tin, and Lead to Palladium Catalyst Formulations for the Direct Formic Acid Fuel Cell. <i>Journal of Physical Chemistry C</i> , 2010, 114, 11665-11672.	3.1	75
56	A microfabricated carbon dioxide sensor for portable applications. , 2010, , .		5
57	MicroCT X-ray Imaging of Water Movement in a PEM Fuel Cell. <i>ECS Transactions</i> , 2009, 16, 995-1000.	0.5	9
58	Impact of Flow Field Characteristics on Water Management of a Proton Exchange Membrane Fuel Cell Using Magnetic Resonance Imaging. <i>ECS Transactions</i> , 2009, 25, 535-542.	0.5	3
59	An onboard hydrogen generation method based on hydrides and water recovery for micro-fuel cells. <i>Journal of Power Sources</i> , 2009, 192, 556-561.	7.8	14
60	Development of diode junction nuclear battery using ⁶³ Ni. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2009, 282, 601-604.	1.5	44
61	The influence of solution pH on rates of an electrocatalytic reaction: Formic acid electrooxidation on platinum and palladium. <i>Electrochimica Acta</i> , 2009, 54, 4073-4078.	5.2	64
62	A miniature direct formic acid fuel cell battery. <i>Journal of Power Sources</i> , 2009, 188, 118-121.	7.8	31
63	Grain Boundary Defect Elimination in a Zeolite Membrane by Rapid Thermal Processing. <i>Science</i> , 2009, 325, 590-593.	12.6	289
64	Nonbiological Inhibition-Based Sensing (NIBS) Demonstrated for the Detection of Toxic Sulfides. <i>Analytical Chemistry</i> , 2009, 81, 6416-6421.	6.5	7
65	A Micro Hydrogen Generator with a Microfluidic Self-Regulating Valve for Sensors and Fuel Cells. , 2009, , .		2
66	Surface energy approach and AFM verification of the (CF) _n treated surface effect and its correlation with adhesion reduction in microvalves. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 085017.	2.6	17
67	Partially Buried Microcolumns for Micro Gas Analyzers. <i>Analytical Chemistry</i> , 2009, 81, 3471-3477.	6.5	46
68	Thermal Analysis of a Microfluidic Preconcentrator for Portable Micro Gas Analysis Systems. , 2009, , .		0
69	A self-regulating hydrogen generator for micro fuel cells. <i>Journal of Power Sources</i> , 2008, 185, 445-450.	7.8	22
70	Integrated micro-power source based on a micro-silicon fuel cell and a micro electromechanical system hydrogen generator. <i>Journal of Power Sources</i> , 2008, 185, 1305-1310.	7.8	24
71	Rapid synthesis of tantalum oxide dielectric films by microwave microwave-assisted atmospheric chemical vapor deposition. <i>Thin Solid Films</i> , 2008, 516, 8307-8314.	1.8	1
72	On-Chip Micro Gas Chromatograph Enabled by a Noncovalently Functionalized Single-Walled Carbon Nanotube Sensor Array. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 5018-5021.	13.8	75

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73	Magnetic resonance imaging investigation of water accumulation and transport in graphite flow fields in a polymer electrolyte membrane fuel cell: Do defects control transport?. Journal of Power Sources, 2008, 182, 76-82.	7.8	49
74	Hydrogen generation from hydrides in millimeter scale reactors for micro proton exchange membrane fuel cell applications. Journal of Power Sources, 2008, 185, 1334-1339.	7.8	38
75	Synthesis and characterization of polyvinylpyrrolidone assisted tantalum pentoxide films. Thin Solid Films, 2008, 516, 4784-4792.	1.8	5
76	Non-equilibrium electrokinetic nanofluidic mixers. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	1
77	Electrochemical Multiphase Microreactor as Fast, Selective, and Portable Chemical Sensor of Trace Toxic Vapors. IEEE Sensors Journal, 2008, 8, 522-526.	4.7	6
78	Non-equilibrium electrokinetic micro/nano fluidic mixer. Lab on A Chip, 2008, 8, 625.	6.0	71
79	Millimeter-Scale Fuel Cell With Onboard Fuel and Passive Control System. Journal of Microelectromechanical Systems, 2008, 17, 1388-1395.	2.5	21
80	Micromachined GC Columns for Fast Separation of Organophosphonate and Organosulfur Compounds. Analytical Chemistry, 2008, 80, 4087-4094.	6.5	67
81	Enhanced toxic gas detection using a MEMS preconcentrator coated with the metal organic framework absorber. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	7
82	The design, fabrication and characterization of a silicon microheater for an integrated MEMS gas preconcentrator. Journal of Micromechanics and Microengineering, 2008, 18, 125001.	2.6	39
83	Micro-fabricated membrane gas valves with a non-stiction coating deposited by C4F8/Ar plasma. Journal of Micromechanics and Microengineering, 2008, 18, 095015.	2.6	11
84	Enzyme-Based Electrochemical Multiphase Microreactor for Detection of Trace Toxic Vapors. IEEE Sensors Journal, 2008, 8, 580-586.	4.7	5
85	Miniaturization of Formic Acid Fuel Cells for Portable Power Applications: a 20 mm ³ Device. ECS Meeting Abstracts, 2008, , .	0.0	0
86	Magnetic Resonance Imaging as an In-Situ Diagnostic Method to Characterize Water Flooding. ECS Transactions, 2008, 16, 1001-1008.	0.5	8
87	Stability of Oxime Based Microsensor for Organo-Phosphate Vapor Detection. ECS Transactions, 2008, 16, 393-396.	0.5	0
88	Recent Progress in Improving the Oxidation of Formic Acid on High Surface Area Platinum and Palladium Catalysts: Surface Alloying and pH Effects. ECS Transactions, 2008, 16, 627-638.	0.5	8
89	Fuel Cell-Based MEMS Power Source. , 2008, , .		0
90	Silicon Nanowires Synthesized via Microwave-Assisted Chemical Vapor Deposition. Electrochemical and Solid-State Letters, 2007, 10, K55.	2.2	3

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91	Change in Radiative Optical Properties of Ta ₂ O ₅ Thin Films due to High-Temperature Heat Treatment. Journal of Heat Transfer, 2007, 129, 27-36.	2.1	8
92	Porous silicon fuel cells for micro power generation. Journal of Micromechanics and Microengineering, 2007, 17, S243-S249.	2.6	28
93	Electrochemical Organophosphate Sensor Based on Oxime Chemistry. Electrochemical and Solid-State Letters, 2007, 10, J19.	2.2	18
94	A Fully-Integrated MEMS Preconcentrator for Rapid Gas Sampling. , 2007, , .		4
95	A Bidirectional Electrostatic Microvalve With Microsecond Switching Performance. Journal of Microelectromechanical Systems, 2007, 16, 1461-1471.	2.5	40
96	A Five-Microvalve Fully Integrated Preconcentrator. , 2007, , .		3
97	Flame dynamics in sub-millimetre combustors. International Journal of Alternative Propulsion, 2007, 1, 325.	0.9	6
98	Smooth Contact Mode Capacitive Pressure Sensor with Polyimide Diaphragm. , 2007, , .		5
99	New Column Designs for MicroGC. , 2007, , .		6
100	Metal-Organic Frameworks as Adsorbents for Trapping and Preconcentration of Organic Phosphonates. Analytical Chemistry, 2007, 79, 1290-1293.	6.5	115
101	Experimental technique using FTIR to estimate IR optical properties at variable temperatures: Application to PMDA-ODA polyimide thin films from 100to380°C. Review of Scientific Instruments, 2007, 78, 053105.	1.3	3
102	A 3D micromixer fabricated with dry film resist. , 2007, , .		4
103	Sol-Gel Synthesis of Thick Ta ₂ O ₅ Films. Chemistry of Materials, 2007, 19, 3155-3161.	6.7	19
104	Flame dynamics and structure within sub-millimeter combustors. AIChE Journal, 2007, 53, 1568-1577.	3.6	52
105	TiO ₂ -Al ₂ O ₃ as a support for propane partial oxidation over Rh. Catalysis Letters, 2007, 113, 13-18.	2.6	9
106	Quantitative MRI study of water distribution during operation of a PEM fuel cell using Teflon® flow fields. Journal of Power Sources, 2007, 171, 678-687.	7.8	68
107	A Nanoporous Silicon Membrane Electrode Assembly for On-Chip Micro Fuel Cell Applications. Journal of Microelectromechanical Systems, 2006, 15, 671-677.	2.5	33
108	An Improved Miniature Direct Formic Acid Fuel Cell Based on Nanoporous Silicon for Portable Power Generation. Journal of the Electrochemical Society, 2006, 153, A1562.	2.9	48

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109	Rapid Production of Metal-Organic Frameworks via Microwave-Assisted Solvothermal Synthesis. Journal of the American Chemical Society, 2006, 128, 12394-12395.	13.7	635
110	Synthesis of High-Temperature Titania-Alumina Supports. Industrial & Engineering Chemistry Research, 2006, 45, 3815-3820.	3.7	19
111	Charge Transfer from Metallic Single-Walled Carbon Nanotube Sensor Arrays. Journal of Physical Chemistry B, 2006, 110, 11055-11061.	2.6	86
112	Size Effects in Electronic and Catalytic Properties of Unsupported Palladium Nanoparticles in Electrooxidation of Formic Acid. Journal of Physical Chemistry B, 2006, 110, 13393-13398.	2.6	467
113	Measurements of the Mechanical Properties of Freestanding Nanoscale Membranes. , 2006, , 323.		0
114	Unsteady Flames in Microcombustion. , 2006, , 363.		2
115	Hydrogen quick and clean. Nature, 2006, 442, 521-522.	27.8	21
116	Unusually active palladium-based catalysts for the electrooxidation of formic acid. Journal of Power Sources, 2006, 157, 78-84.	7.8	256
117	Characterization of a high performing passive direct formic acid fuel cell. Journal of Power Sources, 2006, 158, 129-136.	7.8	125
118	A Multi-Purpose Temperature Control Method for MEMS Microheaters Without a Separate Temperature Sensor. , 2006, , .		1
119	The behavior of palladium catalysts in direct formic acid fuel cells. Journal of Power Sources, 2005, 139, 15-20.	7.8	243
120	Performance characterization of Pd/C nanocatalyst for direct formic acid fuel cells. Journal of Power Sources, 2005, 144, 28-34.	7.8	309
121	Thermal oxidation of tantalum films at various oxidation states from 300 to 700°C. Journal of Applied Physics, 2005, 98, 114908.	2.5	60
122	Experimental observations of methane-oxygen diffusion flame structure in a sub-millimetre microburner. Combustion Theory and Modelling, 2005, 9, 77-92.	1.9	62
123	Unexpected Activity of Palladium on Vanadia Catalysts for Formic Acid Electro-oxidation. Electrochemical and Solid-State Letters, 2005, 8, A291.	2.2	65
124	Diffusion flame instabilities in a 0.75mm non-premixed microburner. Proceedings of the Combustion Institute, 2005, 30, 2499-2507.	3.9	81
125	Rapid Thermal Processing of Mesoporous Silica Films: A Simple Method to Fabricate Films Micrometers Thick for Microelectromechanical Systems (MEMS) Applications. Industrial & Engineering Chemistry Research, 2005, 44, 8933-8937.	3.7	5
126	Effects of Microreactor Geometry on Performance: Differences between Posted Reactors and Channel Reactors. Industrial & Engineering Chemistry Research, 2005, 44, 4267-4271.	3.7	28

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127	Ozone Treatment. , 2005, , 1993-2001.		0
128	Kinetic Study of CO Tolerance during Electro-oxidation of Formic Acid on Spontaneously Deposited Pt/Pd and Pt/Ru Nanoparticles. Electrochemical and Solid-State Letters, 2004, 7, A148.	2.2	25
129	Porous anodic alumina optimized as a catalyst support for microreactors. Journal of Catalysis, 2004, 227, 26-32.	6.2	105
130	A Priori Catalytic Activity Correlations: The Difficult Case of Hydrogen Production from Ammonia. Catalysis Letters, 2004, 96, 117-122.	2.6	283
131	Formic acid decomposition on palladium-coated Pt(110). Surface Science, 2004, 573, 169-175.	1.9	47
132	Porous anodic alumina microreactors for production of hydrogen from ammonia. AIChE Journal, 2004, 50, 829-834.	3.6	104
133	Submillimeter-scale combustion. AIChE Journal, 2004, 50, 3206-3214.	3.6	174
134	Direct Formic Acid Fuel Cells with 600 μm \times 2 at 0.4 V and 22 $^{\circ}\text{C}$. Fuel Cells, 2004, 4, 337-343	2.4	206
135	A miniature air breathing direct formic acid fuel cell. Journal of Power Sources, 2004, 128, 119-124.	7.8	134
136	High power density direct formic acid fuel cells. Journal of Power Sources, 2004, 130, 8-14.	7.8	278
137	Acid loaded porous silicon as a proton exchange membrane for micro-fuel cells. Journal of Power Sources, 2004, 135, 198-203.	7.8	88
138	Development of a microreactor for the production of hydrogen from ammonia. Journal of Power Sources, 2004, 137, 53-61.	7.8	109
139	Kinetic Study of Electro-oxidation of Formic Acid on Spontaneously-Deposited Pt/Pd Nanoparticles. Journal of the Electrochemical Society, 2004, 151, A131.	2.9	43
140	Effects of Nafion as a binding agent for unsupported nanoparticle catalysts. Journal of Power Sources, 2003, 115, 35-39.	7.8	62
141	Catalysts for direct formic acid fuel cells. Journal of Power Sources, 2003, 115, 229-235.	7.8	491
142	Crossover of formic acid through Nafion $^{\text{®}}$ membranes. Journal of Power Sources, 2003, 117, 35-38.	7.8	275
143	UHV, Electrochemical NMR, and Electrochemical Studies of Platinum/Ruthenium Fuel Cell Catalysts. Journal of Physical Chemistry B, 2002, 106, 9581-9589.	2.6	181
144	Evidence for Pyridinium Cation Formation during Coadsorption of Pyridine and Hydrogen on (2 \times 2) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.6	19

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145	The Effect of Substituents on Pyridinium Cation Formation on Pt(110). Journal of Physical Chemistry B, 2002, 106, 3902-3908.	2.6	8
146	Correlations between the Heat of Adsorption and the Position of the Center of the D-Band: Differences between Computation and Experiment. Journal of Physical Chemistry A, 2002, 106, 3084-3091.	2.5	45
147	A nanoparticle catalyst with superior activity for electrooxidation of formic acid. Electrochemistry Communications, 2002, 4, 599-603.	4.7	200
148	Modeling of high-temperature microburners. Proceedings of the Combustion Institute, 2002, 29, 901-907.	3.9	141
149	Direct formic acid fuel cells. Journal of Power Sources, 2002, 111, 83-89.	7.8	777
150	UHV and electrochemical studies of CO and methanol adsorbed at platinum/ruthenium surfaces, and reference to fuel cell catalysis. Electrochimica Acta, 2002, 47, 3637-3652.	5.2	179
151	Methanol conditioning for improved performance of formic acid fuel cells. Journal of Power Sources, 2002, 112, 655-659.	7.8	66
152	Measurement of the Metal Surface Acidity/Electronegativity of Pt(110). Catalysis Letters, 2002, 83, 43-48.	2.6	4
153	Vibrational/HREELS, UV/HREELS, and temperature-programmed desorption of benzene and hydrogen on (2 $\bar{1}$ -1)Pt(110). Surface Science, 2001, 486, 1-8.	1.9	28
154	The Effect of Ruthenium on the Binding of CO, H ₂ , and H ₂ O on Pt(110). Journal of Physical Chemistry B, 2001, 105, 9793-9797.	2.6	69
155	Chemistry of Methoxonium on (2 $\bar{1}$ -1)Pt(110). Journal of Physical Chemistry B, 2001, 105, 8583-8590.	2.6	12
156	Evidence for a cation intermediate during methanol dehydration on Pt(110). Catalysis Letters, 2001, 72, 167-175.	2.6	11
157	Engineering approximations for activation energies in hydrogen transfer reactions. AIChE Journal, 2000, 46, 2041-2052.	3.6	50
158	Catalytic oxidation of odorous organic acids. Catalysis Today, 2000, 62, 347-353.	4.4	10
159	Extensions of the Marcus equation for the prediction of approximate transition state geometries in hydrogen transfer and methyl transfer reactions. Theoretical Chemistry Accounts, 2000, 105, 46-54.	1.4	3
160	Calculated Vibrational Spectra for CHnOHmSpecies. Journal of Physical Chemistry A, 2000, 104, 34-44.	2.5	14
161	Ultraviolet/high resolution electron energy loss spectroscopy of CO on Pt(110) and benzene on Pt(110). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 2339-2344.	2.1	5
162	Role of steps and kinks in catalytic activity. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 1705-1709.	2.1	13

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163	Formation of hydronium and methoxonium on Pt(110): Ab initio determination of spectroscopically observed species. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1999, 17, 1750-1755.	2.1	4
164	Surface reaction pathways of 1,1,1,5,5,5-hexafluoro-2,4-pentanedione on clean and pre-oxidized Ni(110) surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1999, 17, 3477-3480.	2.1	11
165	Chemical vapor etching of copper using oxygen and 1,1,1,5,5,5-hexafluoro-2,4-pentanedione. <i>Thin Solid Films</i> , 1999, 342, 221-229.	1.8	25
166	Use of Buckingham potentials in engineering approximations for chemical kinetics. <i>AIChE Journal</i> , 1999, 45, 1794-1801.	3.6	7
167	The surface chemistry of 1,1,1-trifluoro-2,4-pentanedione on clean and oxygen pre-covered Cu(210). <i>Surface Science</i> , 1999, 419, 97-103.	1.9	5
168	UV/HREELS measurements of the excited states of adsorbed CO: benchmarks for ab initio calculations. <i>Surface Science</i> , 1999, 419, 144-149.	1.9	7
169	Formation of hydronium and water-hydronium complexes during coadsorption of hydrogen and water on (2 $\bar{1}$)Pt(110). <i>Surface Science</i> , 1999, 419, 150-157.	1.9	59
170	An Extension of the Marcus Equation for Atom Transfer Reactions. <i>Journal of Physical Chemistry A</i> , 1999, 103, 7047-7054.	2.5	32
171	An ab Initio Calculation of the Potential for the Interaction of a Hydrogen Atom with an Ethane Molecule. <i>Journal of Physical Chemistry A</i> , 1999, 103, 7725-7729.	2.5	8
172	UV/HREELS spectroscopy of benzene on Pt(110). <i>Catalysis Letters</i> , 1998, 56, 105-109.	2.6	13
173	The Role of Step Atom Density on the Binding and Reaction of Surface Species. <i>Journal of Catalysis</i> , 1998, 179, 163-170.	6.2	21
174	A test of electronegativity equalization during fluorinated ethanol decomposition on Pt(331). <i>Surface Science</i> , 1998, 396, 1-15.	1.9	17
175	The surface chemistry of hexafluoroacetylacetone on clean and oxygen pre-covered Cu(210): a temperature-programmed desorption study. <i>Surface Science</i> , 1998, 409, 428-434.	1.9	14
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177	Conservation of bond order during hydrogenolysis and dehydrogenation reactions. <i>Surface Science</i> , 1998, 417, 238-246.	1.9	7
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