Jingguang G Chen

List of Publications by Year
in descending order

185 papers	28,904 citations	6124 83 h-index	5873 166 g-index
187 all docs	187 docs citations	187 times ranked	25035 citing authors

#	Article	IF	Citations
1	Coupling CO2 reduction with ethane aromatization for enhancing catalytic stability of iron-modified ZSM-5. Journal of Energy Chemistry, 2022, 66, 210-217.	7.1	9
2	CO2-assisted ethane aromatization over zinc and phosphorous modified ZSM-5 catalysts. Applied Catalysis B: Environmental, 2022, 304, 120956.	10.8	21
3	Can CO2-assisted alkane dehydrogenation lead to negative CO2 emissions?. Joule, 2022, 6, 269-273.	11.7	18
4	Unraveling Unique Surface Chemistry of Transition Metal Nitrides in Controlling Selective Câ€“O Bond Scission Pathways of Glycerol. Jacs Au, 2022, 2, 367-379.	3.6	10
5	General Descriptors for CO₂-Assisted Selective Câ€“H/Câ€“C Bond Scission in Ethane. Journal of the American Chemical Society, 2022, 144, 4186-4195.	6.6	26
6	Achieving complete electrooxidation of ethanol by single atomic Rh decoration of Pt nanocubes. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2112109119.	3.3	40
7	Machine learning prediction and experimental verification of Pt-modified nitride catalysts for ethanol reforming with reduced precious metal loading. Applied Catalysis B: Environmental, 2022, 312, 121380.	10.8	7
8	Oxygenate Production from Plasma-Activated Reaction of CO₂ and Ethane. ACS Energy Letters, 2022, 7, 236-241.	8.8	24
9	Electrochemical CO₂ Reduction Reaction over Cu Nanoparticles with Tunable Activity and Selectivity Mediated by Functional Groups in Polymeric Binder. Jacs Au, 2022, 2, 214-222.	3.6	29
10	Tuning Reaction Pathways of Electrochemical Conversion of CO₂ by Growing Pd Shells on Ag Nanocubes. Nano Letters, 2022, 22, 4576-4582.	4.5	17
11	Enhancing glycerol electrooxidation from synergistic interactions of platinum and transition metal carbides. Applied Catalysis B: Environmental, 2022, 316, 121648.	10.8	10
12	Catalytic Tandem CO₂â€“Ethane Reactions and Hydroformylation for C3 Oxygenate Production. ACS Catalysis, 2022, 12, 8279-8290.	5.5	8
13	CO₂ hydrogenation over heterogeneous catalysts at atmospheric pressure: from electronic properties to product selectivity. Green Chemistry, 2021, 23, 249-267.	4.6	74
14	N2 Fixation by Plasma-Activated Processes. Joule, 2021, 5, 300-315.	11.7	139
15	Challenges and Opportunities in Utilizing MXenes of Carbides and Nitrides as Electrocatalysts. Advanced Energy Materials, 2021, 11, 2002967.	10.2	94
16	Bimetallic-Derived Catalysts and Their Application in Simultaneous Upgrading of CO2 and Ethane. Matter, 2021, 4, 408-440.	5.0	26
17	Insight into Acetic Acid Synthesis from the Reaction of CH₄ and CO₂. ACS Catalysis, 2021, 11, 3384-3401.	5.5	53
18	Electrochemical reduction of acetonitrile to ethylamine. Nature Communications, 2021, 12, 1949.	5.8	47

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19	Simultaneously upgrading <scp>CO₂</scp> and light alkanes into valueâ€added products. AIChE Journal, 2021, 67, e17249.	1.8	15
20	Experimental and Theoretical Insights into the Active Sites on WO<i>_x</i>/Pt(111) Surfaces for Dehydrogenation and Dehydration Reactions. ACS Catalysis, 2021, 11, 8023-8032.	5.5	11
21	Transition metal carbides and nitrides as catalysts for thermochemical reactions. Journal of Catalysis, 2021, 404, 929-942.	3.1	27
22	Recent advances in carbon dioxide hydrogenation to produce olefins and aromatics. CheM, 2021, 7, 2277-2311.	5.8	122
23	Trends and descriptors for tuning CO2 electroreduction to synthesis gas over Ag and Au supported on transition metal carbides and nitrides. Chemical Engineering Journal, 2021, 426, 130781.	6.6	23
24	Density functional theory studies of transition metal carbides and nitrides as electrocatalysts. Chemical Society Reviews, 2021, 50, 12338-12376.	18.7	103
25	Comparison of Heterogeneous Hydroformylation of Ethylene and Propylene over RhCo₃/MCM-41 Catalysts. ACS Catalysis, 2021, 11, 14575-14585.	5.5	19
26	Correlating furfural reaction pathways with interactions between furfural and monometallic surfaces. Catalysis Today, 2020, 339, 289-295.	2.2	16
27	Effect of Oxide Support on Catalytic Performance of FeNiâ€based Catalysts for CO₂â€assisted Oxidative Dehydrogenation of Ethane. ChemCatChem, 2020, 12, 494-503.	1.8	24
28	Vibrational Spectroscopic Characterization of Glycerol Reaction Pathways over Metalâ€Modified Molybdenum Carbide Surfaces. ChemCatChem, 2020, 12, 281-286.	1.8	5
29	Isotopic effect on electrochemical CO₂ reduction activity and selectivity in H₂O- and D₂O-based electrolytes over palladium. Chemical Communications, 2020, 56, 106-108.	2.2	17
30	Electrochemical Conversion of CO 2 to Syngas with Controllable CO/H 2 Ratios over Co and Ni Singleâ€Atom Catalysts. Angewandte Chemie, 2020, 132, 3057-3061.	1.6	22
31	Electrochemical Conversion of CO₂ to Syngas with Controllable CO/H₂ Ratios over Co and Ni Singleâ€Atom Catalysts. Angewandte Chemie - International Edition, 2020, 59, 3033-3037.	7.2	203
32	Strong Evidence of the Role of H2O in Affecting Methanol Selectivity from CO2 Hydrogenation over Cu-ZnO-ZrO2. CheM, 2020, 6, 419-430.	5.8	130
33	Electrochemical Conversion of CO₂ to Syngas with Palladium-Based Electrocatalysts. Accounts of Chemical Research, 2020, 53, 1535-1544.	7.6	81
34	Boosting Activity and Selectivity of CO₂ Electroreduction by Preâ€Hydridizing Pd Nanocubes. Small, 2020, 16, e2005305.	5.2	32
35	Identifying Surface Reaction Intermediates in Plasma Catalytic Ammonia Synthesis. ACS Catalysis, 2020, 10, 14763-14774.	5.5	86
36	Oxygen induced promotion of electrochemical reduction of CO2 via co-electrolysis. Nature Communications, 2020, 11, 3844.	5.8	102

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37	Exploring electrocatalytic stability and activity of unmodified and platinum-modified tungsten and niobium nitrides. International Journal of Hydrogen Energy, 2020, 45, 22883-22892.	3.8	17
38	Interfacial Active Sites for CO2 Assisted Selective Cleavage of Câ€“C/Câ€“H Bonds in Ethane. CheM, 2020, 6, 2703-2716.	5.8	57
39	Using natureâ€™s blueprint to expand catalysis with Earth-abundant metals. Science, 2020, 369, .	6.0	306
40	Selective electroreduction of CO2 to acetone by single copper atoms anchored on N-doped porous carbon. Nature Communications, 2020, 11, 2455.	5.8	265
41	Understanding the effect of Mo2C support on the activity of Cu for the hydrodeoxygenation of glycerol. Journal of Catalysis, 2020, 388, 141-153.	3.1	12
42	Excellence <i>versus</i> Diversity? Not an Either/Or Choice. ACS Catalysis, 2020, 10, 7310-7311.	5.5	4
43	Synthesis and electrocatalytic applications of flower-like motifs and associated composites of nitrogen-enriched tungsten nitride (W2N3). Nano Research, 2020, 13, 1434-1443.	5.8	23
44	Bimetallic Electrocatalysts for CO2 Reduction. Topics in Current Chemistry Collections, 2020, , 105-125.	0.2	7
45	Computational and experimental identification of strong synergy of the Fe/ZnO catalyst in promoting acetic acid synthesis from CH₄ and CO₂. Chemical Communications, 2020, 56, 3983-3986.	2.2	27
46	CO₂-Assisted propane aromatization over phosphorus-modified Ga/ZSM-5 catalysts. Catalysis Science and Technology, 2020, 10, 1881-1888.	2.1	28
47	Accelerating CO₂ Electroreduction to CO Over Pd Singleâ€Atom Catalyst. Advanced Functional Materials, 2020, 30, 2000407.	7.8	173
48	Recent Advances in Carbon Dioxide Hydrogenation to Methanol via Heterogeneous Catalysis. Chemical Reviews, 2020, 120, 7984-8034.	23.0	825
49	Review of Plasma-Assisted Catalysis for Selective Generation of Oxygenates from CO₂ and CH₄. ACS Catalysis, 2020, 10, 2855-2871.	5.5	118
50	Promoting H2O2 production via 2-electron oxygen reduction by coordinating partially oxidized Pd with defect carbon. Nature Communications, 2020, 11, 2178.	5.8	209
51	Transition Metal Nitrides as Promising Catalyst Supports for Tuning CO/H 2 Syngas Production from Electrochemical CO 2 Reduction. Angewandte Chemie, 2020, 132, 11441-11444.	1.6	11
52	Reactions of CO2 and ethane enable CO bond insertion for production of C3 oxygenates. Nature Communications, 2020, 11, 1887.	5.8	49
53	Transition Metal Nitrides as Promising Catalyst Supports for Tuning CO/H₂Syngas Production from Electrochemical CO₂Reduction. Angewandte Chemie - International Edition, 2020, 59, 11345-11348.	7.2	100
54	Innentitelbild: Electrochemical Conversion of CO₂ to Syngas with Controllable CO/H₂ Ratios over Co and Ni Singleâ€Atom Catalysts (Angew. Chem. 8/2020). Angewandte Chemie, 2020, 132, 2938-2938.	1.6	0

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55	Tuning the activity and selectivity of electroreduction of CO2 to synthesis gas using bimetallic catalysts. Nature Communications, 2019, 10, 3724.	5.8	156
56	Revealing Energetics of Surface Oxygen Redox from Kinetic Fingerprint in Oxygen Electrocatalysis. Journal of the American Chemical Society, 2019, 141, 13803-13811.	6.6	151
57	CO₂ Hydrogenation to Methanol over ZrO₂-Containing Catalysts: Insights into ZrO₂ Induced Synergy. ACS Catalysis, 2019, 9, 7840-7861.	5.5	253
58	Enhancing Câ€"C Bond Scission for Efficient Ethanol Oxidation using PtIr Nanocube Electrocatalysts. ACS Catalysis, 2019, 9, 7618-7625.	5.5	79
59	Quantification of Active Sites and Elucidation of the Reaction Mechanism of the Electrochemical Nitrogen Reduction Reaction on Vanadium Nitride. Angewandte Chemie - International Edition, 2019, 58, 13768-13772.	7.2	86
60	Constant Electrode Potential Quantum Mechanical Study of CO₂ Electrochemical Reduction Catalyzed by N-Doped Graphene. ACS Catalysis, 2019, 9, 8197-8207.	5.5	42
61	Computational and experimental demonstrations of one-pot tandem catalysis for electrochemical carbon dioxide reduction to methane. Nature Communications, 2019, 10, 3340.	5.8	150
62	Tandem Reactions of CO₂ Reduction and Ethane Aromatization. Journal of the American Chemical Society, 2019, 141, 17771-17782.	6.6	62
63	Carbon dioxide reduction in tandem with light-alkane dehydrogenation. Nature Reviews Chemistry, 2019, 3, 638-649.	13.8	124
64	The effects of bimetallic interactions for CO₂â€assisted oxidative dehydrogenation and dry reforming of propane. AIChE Journal, 2019, 65, e16670.	1.8	38
65	Conversion of CO₂ on a highly active and stable Cu/FeO_x/CeO₂ catalyst: tuning catalytic performance by oxide-oxide interactions. Catalysis Science and Technology, 2019, 9, 3735-3742.	2.1	28
66	Tuning CO2 hydrogenation selectivity via metal-oxide interfacial sites. Journal of Catalysis, 2019, 374, 60-71.	3.1	115
67	Generating Defectâ€Rich Bismuth for Enhancing the Rate of Nitrogen Electroreduction to Ammonia. Angewandte Chemie - International Edition, 2019, 58, 9464-9469.	7.2	226
68	Generating Defectâ€Rich Bismuth for Enhancing the Rate of Nitrogen Electroreduction to Ammonia. Angewandte Chemie, 2019, 131, 9564-9569.	1.6	47
69	1,2-Propanediol as a Surrogate Molecule of Glycerol for Mechanistic Studies of Selective Hydrodeoxygenation Reactions over Mo₂C and Cu/Mo₂C Surfaces. ACS Sustainable Chemistry and Engineering, 2019, 7, 8077-8082.	3.2	12
70	Effectively Increased Efficiency for Electroreduction of Carbon Monoxide Using Supported Polycrystalline Copper Powder Electrocatalysts. ACS Catalysis, 2019, 9, 4709-4718.	5.5	91
71	A General Method to Probe Oxygen Evolution Intermediates at Operating Conditions. Joule, 2019, 3, 1498-1509.	11.7	243
72	Methanol Synthesis from CO₂ Hydrogenation over CuZnCeTi Mixed Oxide Catalysts. Industrial & Engineering Chemistry Research, 2019, 58, 7922-7928.	1.8	23

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73	Enhancing Activity and Reducing Cost for Electrochemical Reduction of CO₂ by Supporting Palladium on Metal Carbides. Angewandte Chemie, 2019, 131, 6337-6341.	1.6	31
74	Exploring the ternary interactions in Cuâ€“ZnOâ€“ZrO2 catalysts for efficient CO2 hydrogenation to methanol. Nature Communications, 2019, 10, 1166.	5.8	258
75	Enhancing Activity and Reducing Cost for Electrochemical Reduction of CO₂ by Supporting Palladium on Metal Carbides. Angewandte Chemie - International Edition, 2019, 58, 6271-6275.	7.2	123
76	Net reduction of CO2 via its thermocatalytic and electrocatalytic transformation reactions in standard and hybrid processes. Nature Catalysis, 2019, 2, 381-386.	16.1	317
77	Trends and Descriptors of Metal-Modified Transition Metal Carbides for Hydrogen Evolution in Alkaline Electrolyte. ACS Catalysis, 2019, 9, 2415-2422.	5.5	74
78	Effects of oxide supports on the CO2 reforming of ethane over Pt-Ni bimetallic catalysts. Applied Catalysis B: Environmental, 2019, 245, 376-388.	10.8	75
79	Shapeâ€Controlled CO₂ Electrochemical Reduction on Nanosized Pd Hydride Cubes and Octahedra. Advanced Energy Materials, 2019, 9, 1802840.	10.2	132
80	Elucidating the roles of metallic Ni and oxygen vacancies in CO2 hydrogenation over Ni/CeO2 using isotope exchange and in situ measurements. Applied Catalysis B: Environmental, 2019, 245, 360-366.	10.8	57
81	Oxidative dehydrogenation and dry reforming of n-butane with CO2 over NiFe bimetallic catalysts. Applied Catalysis B: Environmental, 2018, 231, 213-223.	10.8	33
82	Electrochemical CO2 Reduction via Low-Valent Nickel Single-Atom Catalyst. Joule, 2018, 2, 587-589.	11.7	38
83	Cobalt-modified molybdenum carbide as a selective catalyst for hydrodeoxygenation of furfural. Applied Catalysis B: Environmental, 2018, 233, 160-166.	10.8	64
84	Combining CO2 reduction with propane oxidative dehydrogenation over bimetallic catalysts. Nature Communications, 2018, 9, 1398.	5.8	113
85	Reducing Iridium Loading in Oxygen Evolution Reaction Electrocatalysts Using Coreâ€“Shell Particles with Nitride Cores. ACS Catalysis, 2018, 8, 2615-2621.	5.5	117
86	Growth of Nanoparticles with Desired Catalytic Functions by Controlled Doping-Segregation of Metal in Oxide. Chemistry of Materials, 2018, 30, 1585-1592.	3.2	11
87	A Comparative Study of Hydrodeoxygenation of Furfural Over Fe/Pt(111) and Fe/Mo2C Surfaces. Topics in Catalysis, 2018, 61, 439-445.	1.3	13
88	LaFe0.9Ni0.1O3 perovskite catalyst with enhanced activity and coke-resistance for dry reforming of ethane. Journal of Catalysis, 2018, 358, 168-178.	3.1	67
89	Combining CO₂ Reduction with Ethane Oxidative Dehydrogenation by Oxygen-Modification of Molybdenum Carbide. ACS Catalysis, 2018, 8, 5374-5381.	5.5	58
90	Enhancing catalytic selectivity and stability for CO2 hydrogenation to methanol using a solid-solution catalyst. National Science Review, 2018, 5, 607-608.	4.6	3

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91	Identifying Dynamic Structural Changes of Active Sites in Ptâ€“Ni Bimetallic Catalysts Using Multimodal Approaches. ACS Catalysis, 2018, 8, 4120-4131.	5.5	54
92	Insight into the synergistic effect between nickel and tungsten carbide for catalyzing urea electrooxidation in alkaline electrolyte. Applied Catalysis B: Environmental, 2018, 232, 365-370.	10.8	68
93	Tungsten Carbide and Cobalt Modified Nickel Nanoparticles Supported on Multiwall Carbon Nanotubes as Highly Efficient Electrocatalysts for Urea Oxidation in Alkaline Electrolyte. ACS Applied Materials & Interfaces, 2018, 10, 41338-41343.	4.0	25
94	Mechanistic Insights into Electrochemical Nitrogen Reduction Reaction on Vanadium Nitride Nanoparticles. Journal of the American Chemical Society, 2018, 140, 13387-13391.	6.6	438
95	Bimetallic Electrocatalysts for CO2 Reduction. Topics in Current Chemistry, 2018, 376, 41.	3.0	57
96	Controlling reaction pathways of selective Câ€“O bond cleavage of glycerol. Nature Communications, 2018, 9, 4612.	5.8	54
97	Understanding the Role of Functional Groups in Polymeric Binder for Electrochemical Carbon Dioxide Reduction on Gold Nanoparticles. Advanced Functional Materials, 2018, 28, 1804762.	7.8	76
98	Palladium-Modified Tungsten Carbide for Ethanol Electrooxidation: From Surface Science Studies to ElectrochemicalÂEvaluation. Journal of the Electrochemical Society, 2018, 165, J3031-J3038.	1.3	7
99	Activity and Selectivity Control in CO₂ Electroreduction to Multicarbon Products over CuO_{<i>x</i>} Catalysts via Electrolyte Design. ACS Catalysis, 2018, 8, 10012-10020.	5.5	173
100	Beyond fossil fuelâ€“driven nitrogen transformations. Science, 2018, 360, .	6.0	1,379
101	L-Phenylalanine-Templated Platinum Catalyst with Enhanced Performance for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2018, 10, 21321-21327.	4.0	15
102	Hydrodeoxygenation of biomass-derived oxygenates over metal carbides: from model surfaces to powder catalysts. Green Chemistry, 2018, 20, 2679-2696.	4.6	80
103	Active sites for tandem reactions of CO ₂ reduction and ethane dehydrogenation. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8278-8283.	3.3	105
104	Role of Surface Oxophilicity in Copper-Catalyzed Water Dissociation. ACS Catalysis, 2018, 8, 9327-9333.	5.5	46
105	Controlled Synthesis of Fe₃O₄ Nanospheres Coated with Nitrogen-Doped Carbon for High Performance Supercapacitors. ACS Applied Energy Materials, 2018, 1, 4599-4605.	2.5	21
106	High selectivity of CO₂ hydrogenation to CO by controlling the valence state of nickel using perovskite. Chemical Communications, 2018, 54, 7354-7357.	2.2	49
107	Mechanistic study of dry reforming of ethane by CO₂ on a bimetallic PtNi(111) model surface. Catalysis Science and Technology, 2018, 8, 3748-3758.	2.1	24
108	Ringâ€Opening Reaction of Furfural and Tetrahydrofurfuryl Alcohol on Hydrogenâ€Predosed Iridium(1â€‰1â€‰1) and Cobalt/Iridium(1â€‰1â€‰1) Surfaces. ChemCatChem, 2017, 9, 1701-1707.	1.8	34

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109	Hydrogenation of CO2 to methanol over CuCeTiO catalysts. Applied Catalysis B: Environmental, 2017, 206, 704-711.	10.8	109
110	Comparison of Methodologies of Activation Barrier Measurements for Reactions with Deactivation. Industrial & Engineering Chemistry Research, 2017, 56, 1360-1364.	1.8	11
111	Reactions of water and C1 molecules on carbide and metal-modified carbide surfaces. Chemical Society Reviews, 2017, 46, 1807-1823.	18.7	85
112	Pt/Mo2C/C-cp as a highly active and stable catalyst for ethanol electrooxidation. Journal of Power Sources, 2017, 345, 182-189.	4.0	30
113	The Central Role of Bicarbonate in the Electrochemical Reduction of Carbon Dioxide on Gold. Journal of the American Chemical Society, 2017, 139, 3774-3783.	6.6	479
114	Electrochemical reduction of CO₂to synthesis gas with controlled CO/H₂ratios. Energy and Environmental Science, 2017, 10, 1180-1185.	15.6	341
115	Active sites for CO ₂ hydrogenation to methanol on Cu/ZnO catalysts. Science, 2017, 355, 1296-1299.	6.0	1,180
116	Quantum Mechanical Study of N-Heterocyclic Carbene Adsorption on Au Surfaces. Journal of Physical Chemistry A, 2017, 121, 2674-2682.	1.1	29
117	Opportunities and Challenges in Utilizing Metal-Modified Transition Metal Carbides as Low-Cost Electrocatalysts. Joule, 2017, 1, 253-263.	11.7	94
118	Grand Canonical Quantum Mechanical Study of the Effect of the Electrode Potential on N-Heterocyclic Carbene Adsorption on Au Surfaces. Journal of Physical Chemistry C, 2017, 121, 24618-24625.	1.5	12
119	Best Practices in Pursuit of Topics in Heterogeneous Electrocatalysis. ACS Catalysis, 2017, 7, 6392-6393.	5.5	126
120	Response to Comment on â€œActive sites for CO ₂ hydrogenation to methanol on Cu/ZnO catalystsâ€• Science, 2017, 357, .	6.0	37
121	Tuning Selectivity of CO₂ Hydrogenation Reactions at the Metal/Oxide Interface. Journal of the American Chemical Society, 2017, 139, 9739-9754.	6.6	823
122	Adsorbate-mediated strong metalâ€"support interactions in oxide-supported Rh catalysts. Nature Chemistry, 2017, 9, 120-127.	6.6	609
123	Understanding the Role of M/Pt(111) (M = Fe, Co, Ni, Cu) Bimetallic Surfaces for Selective Hydrodeoxygenation of Furfural. ACS Catalysis, 2017, 7, 5758-5765.	5.5	76
124	Trends in Hydrogen Evolution Activity of Metalâ€Modified Molybdenum Carbides in Alkaline and Acid Electrolytes. ChemElectroChem, 2016, 3, 1686-1693.	1.7	19
125	Dry Reforming of Ethane and Butane with CO₂ over PtNi/CeO₂ Bimetallic Catalysts. ACS Catalysis, 2016, 6, 7283-7292.	5.5	103
126	Optimizing Binding Energies of Key Intermediates for CO₂ Hydrogenation to Methanol over Oxide-Supported Copper. Journal of the American Chemical Society, 2016, 138, 12440-12450.	6.6	565

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127	CO₂ Hydrogenation over Oxideâ€Supported PtCo Catalysts: The Role of the Oxide Support in Determining the Product Selectivity. Angewandte Chemie - International Edition, 2016, 55, 7968-7973.	7.2	261
128	Metal-modified niobium carbides as low-cost and impurity-resistant electrocatalysts for hydrogen evolution in acidic and alkaline electrolytes. International Journal of Hydrogen Energy, 2016, 41, 5948-5954.	3.8	21
129	CO2 hydrogenation on Pt, Pt/SiO2 and Pt/TiO2: Importance of synergy between Pt and oxide support. Journal of Catalysis, 2016, 343, 115-126.	3.1	250
130	Toward Benchmarking in Catalysis Science: Best Practices, Challenges, and Opportunities. ACS Catalysis, 2016, 6, 2590-2602.	5.5	190
131	Reforming and oxidative dehydrogenation of ethane with CO2 as a soft oxidant over bimetallic catalysts. Journal of Catalysis, 2016, 343, 168-177.	3.1	115
132	Catalytic reduction of CO₂ by H₂ for synthesis of CO, methanol and hydrocarbons: challenges and opportunities. Energy and Environmental Science, 2016, 9, 62-73.	15.6	979
133	Identifying Different Types of Catalysts for CO₂ Reduction by Ethane through Dry Reforming and Oxidative Dehydrogenation. Angewandte Chemie - International Edition, 2015, 54, 15501-15505.	7.2	99
134	Identifying Different Types of Catalysts for CO 2 Reduction by Ethane through Dry Reforming and Oxidative Dehydrogenation. Angewandte Chemie, 2015, 127, 15721-15725.	1.6	7
135	Correlating hydrogen oxidation and evolution activity on platinum at different pH with measured hydrogen binding energy. Nature Communications, 2015, 6, 5848.	5.8	784
136	Low Pressure CO₂ Hydrogenation to Methanol over Gold Nanoparticles Activated on a CeO_{<i>x</i>}/TiO₂ Interface. Journal of the American Chemical Society, 2015, 137, 10104-10107.	6.6	200
137	Reaction Pathways of Biomassâ€Derived Oxygenates over Metals and Carbides: From Model Surfaces to Supported Catalysts. ChemCatChem, 2015, 7, 1402-1421.	1.8	50
138	Replacing Precious Metals with Carbide Catalysts for Hydrogenation Reactions. Topics in Catalysis, 2015, 58, 240-246.	1.3	27
139	Highly porous non-precious bimetallic electrocatalysts for efficient hydrogen evolution. Nature Communications, 2015, 6, 6567.	5.8	440
140	Hydrogenation of CO₂ to Methanol: Importance of Metalâ€“Oxide and Metalâ€“Carbide Interfaces in the Activation of CO₂. ACS Catalysis, 2015, 5, 6696-6706.	5.5	374
141	Theoretical and Experimental Studies of Ethanol Decomposition and Electrooxidation over Pt-Modified Tungsten Carbide. Journal of the Electrochemical Society, 2014, 161, E3165-E3170.	1.3	10
142	Controlling Câ€“O, Câ€“C and Câ€“H bond scission for deoxygenation, reforming, and dehydrogenation of ethanol using metal-modified molybdenum carbide surfaces. Green Chemistry, 2014, 16, 777-784.	4.6	51
143	Theoretical prediction and experimental verification of low loading of platinum on titanium carbide as low-cost and stable electrocatalysts. Journal of Catalysis, 2014, 312, 216-220.	3.1	56
144	Molybdenum Carbide as Alternative Catalysts to Precious Metals for Highly Selective Reduction of CO₂ to CO. Angewandte Chemie - International Edition, 2014, 53, 6705-6709.	7.2	329

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145	A selective and efficient electrocatalyst for carbon dioxide reduction. Nature Communications, 2014, 5, 3242.	5.8	1,111
146	Non-precious metal electrocatalysts with high activity for hydrogen oxidation reaction in alkaline electrolytes. Energy and Environmental Science, 2014, 7, 1719-1724.	15.6	276
147	Trends in Electrochemical Stability of Transition Metal Carbides and Their Potential Use As Supports for Low-Cost Electrocatalysts. ACS Catalysis, 2014, 4, 1558-1562.	5.5	142
148	Theoretical and Experimental Studies of Câ€“C versus Câ€“O Bond Scission of Ethylene Glycol Reaction Pathways via Metal-Modified Molybdenum Carbides. ACS Catalysis, 2014, 4, 1409-1418.	5.5	45
149	Theoretical and experimental studies of the adsorption geometry and reaction pathways of furfural over FeNi bimetallic model surfaces and supported catalysts. Journal of Catalysis, 2014, 317, 253-262.	3.1	88
150	Reaction Pathways of Propanal and 1-Propanol on Fe/Ni(111) and Cu/Ni(111) Bimetallic Surfaces. Journal of Physical Chemistry C, 2014, 118, 11340-11349.	1.5	33
151	Molybdenum Carbide as a Highly Selective Deoxygenation Catalyst for Converting Furfural to 2â€Methylfuran. ChemSusChem, 2014, 7, 2146-2149.	3.6	105
152	Nanostructured Electrodes for Highâ€Performance Pseudocapacitors. Angewandte Chemie - International Edition, 2013, 52, 1882-1889.	7.2	501
153	Trends in the catalytic reduction of CO2 by hydrogen over supported monometallic and bimetallic catalysts. Journal of Catalysis, 2013, 301, 30-37.	3.1	168
154	Selective Hydrodeoxygenation of Biomassâ€Derived Oxygenates to Unsaturated Hydrocarbons using Molybdenum Carbide Catalysts. ChemSusChem, 2013, 6, 798-801.	3.6	173
155	Correlating the hydrogen evolution reaction activity in alkaline electrolytes with the hydrogen binding energy on monometallic surfaces. Energy and Environmental Science, 2013, 6, 1509.	15.6	869
156	Challenges and opportunities in correlating bimetallic model surfaces and supported catalysts. Journal of Catalysis, 2013, 308, 2-10.	3.1	31
157	Atomic layer deposition synthesis of platinumâ€“tungsten carbide coreâ€“shell catalysts for the hydrogen evolution reaction. Chemical Communications, 2012, 48, 1063-1065.	2.2	111
158	Review of Pt-Based Bimetallic Catalysis: From Model Surfaces to Supported Catalysts. Chemical Reviews, 2012, 112, 5780-5817.	23.0	1,082
159	Metal overlayer on metal carbide substrate: unique bimetallic properties for catalysis and electrocatalysis. Chemical Society Reviews, 2012, 41, 8021.	18.7	137
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