

Haijun Jiao

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3807055/publications.pdf>

Version: 2024-02-01

176
papers

13,026
citations

44069

48
h-index

24258

110
g-index

181
all docs

181
docs citations

181
times ranked

9742
citing authors

#	ARTICLE	IF	CITATIONS
1	Nucleus-Independent Chemical Shifts: A Simple and Efficient Aromaticity Probe. <i>Journal of the American Chemical Society</i> , 1996, 118, 6317-6318.	13.7	5,447
2	Selective Catalytic Hydrogenations of Nitriles, Ketones, and Aldehydes by Well-Defined Manganese Pincer Complexes. <i>Journal of the American Chemical Society</i> , 2016, 138, 8809-8814.	13.7	485
3	Hydrogenation of Esters to Alcohols with a Well-Defined Iron Complex. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 8722-8726.	13.8	269
4	Mild and selective hydrogenation of aromatic and aliphatic (di)nitriles with a well-defined iron pincer complex. <i>Nature Communications</i> , 2014, 5, 4111.	12.8	260
5	Hydrogenation of Esters to Alcohols Catalyzed by Defined Manganese Pincer Complexes. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 15364-15368.	13.8	259
6	Manganese(I)-Catalyzed Enantioselective Hydrogenation of Ketones Using a Defined Chiral PNP Pincer Ligand. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 11237-11241.	13.8	180
7	A Stable Manganese Pincer Catalyst for the Selective Dehydrogenation of Methanol. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 559-562.	13.8	158
8	Unravelling the Mechanism of Basic Aqueous Methanol Dehydrogenation Catalyzed by Ru-PNP Pincer Complexes. <i>Journal of the American Chemical Society</i> , 2016, 138, 14890-14904.	13.7	155
9	The Mechanism of Potassium Promoter: Enhancing the Stability of Active Surfaces. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 7403-7406.	13.8	141
10	Kinetic aspect of CO ₂ reforming of CH ₄ on Ni(111): A density functional theory calculation. <i>Surface Science</i> , 2007, 601, 1271-1284.	1.9	140
11	Control of coordinatively unsaturated Zr sites in ZrO ₂ for efficient C-H bond activation. <i>Nature Communications</i> , 2018, 9, 3794.	12.8	133
12	In situ formation of ZnO _x species for efficient propane dehydrogenation. <i>Nature</i> , 2021, 599, 234-238.	27.8	133
13	CO ₂ Reforming of CH ₄ on Ni(111): A Density Functional Theory Calculation. <i>Journal of Physical Chemistry B</i> , 2006, 110, 9976-9983.	2.6	124
14	Formic Acid Dehydrogenation on Ni(111) and Comparison with Pd(111) and Pt(111). <i>Journal of Physical Chemistry C</i> , 2012, 116, 4149-4156.	3.1	115
15	Exploring Furfural Catalytic Conversion on Cu(111) from Computation. <i>ACS Catalysis</i> , 2015, 5, 4020-4032.	11.2	109
16	Stability of \hat{I}^2 -Mo ₂ C Facets from ab Initio Atomistic Thermodynamics. <i>Journal of Physical Chemistry C</i> , 2011, 115, 22360-22368.	3.1	108
17	Accurate Calculations of Bond Dissociation Enthalpies with Density Functional Methods. <i>Journal of Physical Chemistry A</i> , 2003, 107, 9991-9996.	2.5	107
18	Improved Second Generation Iron Pincer Complexes for Effective Ester Hydrogenation. <i>Advanced Synthesis and Catalysis</i> , 2016, 358, 820-825.	4.3	104

#	ARTICLE	IF	CITATIONS
19	CO dissociation on clean and hydrogen precovered Fe(111) surfaces. <i>Journal of Catalysis</i> , 2007, 249, 174-184.	6.2	102
20	When Density Functional Approximations Meet Iron Oxides. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 5132-5144.	5.3	102
21	Coverage-Dependent CO Adsorption and Dissociation Mechanisms on Iron Surfaces from DFT Computations. <i>ACS Catalysis</i> , 2014, 4, 1991-2005.	11.2	95
22	Cooperative catalytic methoxycarbonylation of alkenes: uncovering the role of palladium complexes with hemilabile ligands. <i>Chemical Science</i> , 2018, 9, 2510-2516.	7.4	94
23	Surface morphology of Hägg iron carbide (γ -Fe ₅ C ₂) from ab initio atomistic thermodynamics. <i>Journal of Catalysis</i> , 2012, 294, 47-53.	6.2	90
24	Hydrogenation of Esters to Alcohols Catalyzed by Defined Manganese Pincer Complexes. <i>Angewandte Chemie</i> , 2016, 128, 15590-15594.	2.0	88
25	Hydrogen Adsorption Structures and Energetics on Iron Surfaces at High Coverage. <i>Journal of Physical Chemistry C</i> , 2014, 118, 4181-4188.	3.1	84
26	The effect of phase composition and crystallite size on activity and selectivity of ZrO ₂ in non-oxidative propane dehydrogenation. <i>Journal of Catalysis</i> , 2019, 371, 313-324.	6.2	74
27	Density Function Theory Study of CO Adsorption on Fe ₃ O ₄ (111) Surface. <i>Journal of Physical Chemistry B</i> , 2006, 110, 13920-13925.	2.6	73
28	Formation of CH _x Species from CO Dissociation on Double-Stepped Co(0001): Exploring Fischer-Tropsch Mechanism. <i>Journal of Physical Chemistry C</i> , 2008, 112, 14108-14116.	3.1	71
29	Iridium-Catalyzed Hydrogenation of Carboxylic Acid Esters. <i>ChemCatChem</i> , 2014, 6, 2810-2814.	3.7	65
30	Manganese(I)-Catalyzed Enantioselective Hydrogenation of Ketones Using a Defined Chiral PNP Pincer Ligand. <i>Angewandte Chemie</i> , 2017, 129, 11389-11393.	2.0	64
31	Cobalt Pincer Complexes for Catalytic Reduction of Carboxylic Acid Esters. <i>Chemistry - A European Journal</i> , 2018, 24, 1046-1052.	3.3	63
32	A new strategy for the efficient synthesis of 2-methylfuran and γ -butyrolactone. <i>New Journal of Chemistry</i> , 2003, 27, 208-210.	2.8	62
33	Density Functional Theory Study of CO Adsorption on Fe ₅ C ₂ (001), -(100), and -(110) Surfaces. <i>Journal of Physical Chemistry B</i> , 2004, 108, 9094-9104.	2.6	62
34	Density functional theory study of CO adsorption on the (100), (001) and (010) surfaces of Fe ₃ C. <i>Journal of Molecular Catalysis A</i> , 2007, 269, 169-178.	4.8	60
35	Dissociative Hydrogen Adsorption on the Hexagonal Mo ₂ C Phase at High Coverage. <i>Journal of Physical Chemistry C</i> , 2014, 118, 8079-8089.	3.1	60
36	Coverage dependent water dissociative adsorption on Fe(110) from DFT computation. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 8811-8821.	2.8	60

#	ARTICLE	IF	CITATIONS
37	Homogeneous cobalt-catalyzed reductive amination for synthesis of functionalized primary amines. <i>Nature Communications</i> , 2019, 10, 5443.	12.8	57
38	Density functional theory study into the adsorption of CO ₂ , H and CH _x (x=0-3) as well as C ₂ H ₄ on $\bar{1}\bar{1}$ -Mo ₂ C(0001). <i>Surface Science</i> , 2006, 600, 2329-2337.	1.9	54
39	High Coverage CO Activation Mechanisms on Fe(100) from Computations. <i>Journal of Physical Chemistry C</i> , 2014, 118, 1095-1101.	3.1	54
40	Cobalt-Catalyzed Aqueous Dehydrogenation of Formic Acid. <i>Chemistry - A European Journal</i> , 2019, 25, 8459-8464.	3.3	54
41	Mechanisms and Energies of Water Gas Shift Reaction on Fe-, Co-, and Ni-Promoted MoS ₂ Catalysts. <i>Journal of Physical Chemistry C</i> , 2012, 116, 25368-25375.	3.1	53
42	Adsorption Equilibria of CO Coverage on $\bar{1}\bar{2}$ -Mo ₂ C Surfaces. <i>Journal of Physical Chemistry C</i> , 2012, 116, 6340-6348.	3.1	53
43	Fine-Tuning the Reactivity and Stability by Systematic Ligand Variations in CpCo ^I Complexes as Catalysts for [2+2] Cycloaddition Reactions. <i>Chemistry - A European Journal</i> , 2013, 19, 2548-2554.	3.3	52
44	High Coverage CO Adsorption and Dissociation on the Orthorhombic Mo ₂ C(100) Surface. <i>Journal of Physical Chemistry C</i> , 2014, 118, 3162-3171.	3.1	52
45	Hydrogenation of Aliphatic and Aromatic Nitriles Using a Defined Ruthenium PNP Pincer Catalyst. <i>European Journal of Organic Chemistry</i> , 2015, 2015, 5944-5948.	2.4	51
46	Mechanisms of Mo ₂ C(101)-Catalyzed Furfural Selective Hydrodeoxygenation to 2-Methylfuran from Computation. <i>ACS Catalysis</i> , 2016, 6, 6790-6803.	11.2	51
47	Determining surface structure and stability of $\bar{1}\bar{1}\bar{0}$ -Fe ₂ C, $\bar{1}\bar{1}\bar{1}$ -Fe ₅ C ₂ , $\bar{1}\bar{1}\bar{2}$ -Fe ₃ C and Fe ₄ C phases under carburization environment from combined DFT and atomistic thermodynamic studies. <i>Journal of Lithic Studies</i> , 2015, 1, 44-60.	0.5	50
48	High coverage adsorption and co-adsorption of CO and H ₂ on Ru(0001) from DFT and thermodynamics. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 19446-19456.	2.8	50
49	Stability and Reactivity of Intermediates of Methanol Related Reactions and C-C Bond Formation over H-ZSM-5 Acidic Catalyst: A Computational Analysis. <i>Journal of Physical Chemistry C</i> , 2016, 120, 6075-6087.	3.1	50
50	CO ₂ dissociation on Ni(211). <i>Surface Science</i> , 2009, 603, 2991-2998.	1.9	47
51	High Coverage Water Aggregation and Dissociation on Fe(100): A Computational Analysis. <i>Journal of Physical Chemistry C</i> , 2014, 118, 26139-26154.	3.1	47
52	Structure-Activity-Selectivity Relationships in Propane Dehydrogenation over Rh/ZrO ₂ Catalysts. <i>ACS Catalysis</i> , 2020, 10, 6377-6388.	11.2	47
53	Structures and Energies of Coadsorbed CO and H ₂ on Fe ₅ C ₂ (001), Fe ₅ C ₂ (110), and Fe ₅ C ₂ (100). <i>Journal of Physical Chemistry B</i> , 2005, 109, 10922-10935.	2.6	46
54	Unraveling the Origins of the Synergy Effect between ZrO ₂ and CrO _x in Supported CrZrO _x for Propene Formation in Nonoxidative Propane Dehydrogenation. <i>ACS Catalysis</i> , 2020, 10, 1575-1590.	11.2	46

#	ARTICLE	IF	CITATIONS
55	Molybdenum carbide catalysed hydrogen production from formic acid – A density functional theory study. <i>Journal of Power Sources</i> , 2014, 246, 548-555.	7.8	45
56	Density Functional Theory Study of Hydrogen Adsorption on Fe ₅ C ₂ (001), Fe ₅ C ₂ (110), and Fe ₅ C ₂ (100). <i>Journal of Physical Chemistry B</i> , 2005, 109, 833-844.	2.6	43
57	Methane formation mechanism in the initial methanol-to-olefins process catalyzed by SAPO-34. <i>Catalysis Science and Technology</i> , 2016, 6, 5526-5533.	4.1	43
58	Chemoselective semihydrogenation of alkynes catalyzed by manganese(II)-PNP pincer complexes. <i>Catalysis Science and Technology</i> , 2020, 10, 3994-4001.	4.1	43
59	On the Role of a Cobalt Promoter in a Water-Gas-Shift Reaction on Co-MoS ₂ . <i>Journal of Physical Chemistry C</i> , 2010, 114, 16669-16676.	3.1	42
60	Reactions of CO, H ₂ O, CO ₂ , and H ₂ on the Clean and Precovered Fe(110) Surfaces – A DFT Investigation. <i>Journal of Physical Chemistry C</i> , 2015, 119, 28377-28388.	3.1	40
61	The Structure and Possible Catalytic Sites of MoS ₃ as a Model of Amorphous Molybdenum Trisulfide: A Computational Study. <i>Journal of the American Chemical Society</i> , 2001, 123, 7334-7339.	13.7	39
62	Activation mechanisms of H ₂ , O ₂ , H ₂ O, CO ₂ , CO, CH ₄ and C ₂ H _x on metallic Mo ₂ C(001) as well as Mo/C terminated Mo ₂ C(101) from density functional theory computations. <i>Applied Catalysis A: General</i> , 2016, 524, 223-236.	4.3	39
63	Formation of Carbon Species on Ni(111): Structure and Stability. <i>Journal of Physical Chemistry C</i> , 2007, 111, 10894-10903.	3.1	38
64	Hydrogen generation from formic acid decomposition on Ni(211), Pd(211) and Pt(211). <i>Journal of Molecular Catalysis A</i> , 2013, 379, 169-177.	4.8	38
65	A comparative computationally study about the defined m(II) pincer hydrogenation catalysts (m = Fe, Ru, Ti). <i>Journal of Catalysis</i> , 2018, 361, 1913-1920.	3.5	38
66	Isomerization of Allylic Alcohols to Ketones Catalyzed by Well-Defined Iron PNP Pincer Catalysts. <i>Chemistry - A European Journal</i> , 2018, 24, 4043-4049.	3.3	38
67	Zirconium-Catalyzed Atom-Economical Synthesis of 1,1-Diborylalkanes from Terminal and Internal Alkenes. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 13608-13612.	13.8	38
68	Stable surface terminations of orthorhombic Mo ₂ C catalysts and their CO activation mechanisms. <i>Applied Catalysis A: General</i> , 2014, 478, 146-156.	4.3	37
69	A Stable Manganese Pincer Catalyst for the Selective Dehydrogenation of Methanol. <i>Angewandte Chemie</i> , 2017, 129, 574-577.	2.0	37
70	Enantioselective Hydrogenation of Ketones using Different Metal Complexes with a Chiral PNP Pincer Ligand. <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 1913-1920.	4.3	37
71	Adsorption and Dissociation of CO as Well as CH _x Coupling and Hydrogenation on the Clean and Oxygen Pre-covered Co(0001) Surfaces. <i>Journal of Physical Chemistry C</i> , 2008, 112, 3840-3848.	3.1	36
72	Aerobic Oxidative Homo- and Cross-Coupling of Amines Catalyzed by Phenazine Radical Cations. <i>Journal of Organic Chemistry</i> , 2018, 83, 13481-13490.	3.2	36

#	ARTICLE	IF	CITATIONS
73	Morphology and Reactivity Evolution of HCP and FCC Ru Nanoparticles under CO Atmosphere. <i>ACS Catalysis</i> , 2019, 9, 2768-2776.	11.2	36
74	Morphology control of K ₂ O promoter on H ₂ agg carbide (Î±-Fe ₅ C ₂) under Fischer-Tropsch synthesis condition. <i>Catalysis Today</i> , 2016, 261, 93-100.	4.4	35
75	Selective Base-free Transfer Hydrogenation of Î±,Î²-unsaturated Carbonyl Compounds using <i>i</i> -PrOH or EtOH as Hydrogen Source. <i>Chemistry - A European Journal</i> , 2018, 24, 2725-2734.	3.3	34
76	A selective route to aryl-triphosphiranes and their titanocene-induced fragmentation. <i>Chemical Science</i> , 2019, 10, 7859-7867.	7.4	34
77	Density functional theory study of CO adsorption on the Fe(111) surface. <i>Chemical Physics Letters</i> , 2004, 400, 35-41.	2.6	33
78	Density Functional Theory Study of Triangular Molybdenum Sulfide Nanocluster and CO Adsorption on It. <i>Journal of Physical Chemistry B</i> , 2005, 109, 13704-13710.	2.6	33
79	Ligand- and Solvent-tuned Chemoselective Carbonylation of Bromoaryl Triflates. <i>Chemistry - A European Journal</i> , 2017, 23, 13369-13378.	3.3	32
80	Exploring the mechanisms of aqueous methanol dehydrogenation catalyzed by defined PNP Mn and Re pincer complexes under base-free as well as strong base conditions. <i>Catalysis Science and Technology</i> , 2018, 8, 3649-3665.	4.1	32
81	Tuning the Selectivity of Palladium Catalysts for Hydroformylation and Semihydrogenation of Alkynes: Experimental and Mechanistic Studies. <i>ACS Catalysis</i> , 2020, 10, 12167-12181.	11.2	31
82	Synthesis of Group 9 Metal-Olefin Complexes with Identical Ligand Frameworks and Comparison of their Catalytic Activity in [2+2]-Cycloaddition and other Addition Reactions. <i>Advanced Synthesis and Catalysis</i> , 2011, 353, 3423-3433.	4.3	30
83	Energetics of Carbon deposition on Fe(100) and Fe(110) surfaces and subsurfaces. <i>Surface Science</i> , 2012, 606, 733-739.	1.9	30
84	Copper Promotion in CO Adsorption and Dissociation on the Fe(100) Surface. <i>Journal of Physical Chemistry C</i> , 2014, 118, 20472-20480.	3.1	30
85	Theoretical study about Mo ₂ C(101)-catalyzed hydrodeoxygenation of butyric acid to butane for biomass conversion. <i>Catalysis Science and Technology</i> , 2016, 6, 4923-4936.	4.1	30
86	Location, distribution and acidity of Al substitution in ZSM-5 with different Si/Al ratios - a periodic DFT computation. <i>Catalysis Science and Technology</i> , 2017, 7, 5694-5708.	4.1	30
87	General and selective synthesis of primary amines using Ni-based homogeneous catalysts. <i>Chemical Science</i> , 2020, 11, 4332-4339.	7.4	29
88	Coverage Dependent Water Dissociative Adsorption on the Clean and O-Precovered Fe(111) Surfaces. <i>Journal of Physical Chemistry C</i> , 2015, 119, 11714-11724.	3.1	27
89	1-Titanacyclobuta-2,3-diene - an elusive four-membered cyclic allene. <i>Chemical Science</i> , 2019, 10, 5319-5325.	7.4	26
90	A General and Highly Selective Palladium-catalyzed Hydroamidation of 1,3-diyne. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 371-379.	13.8	26

#	ARTICLE	IF	CITATIONS
91	Efficient Palladium-Catalyzed Carbonylation of 1,3-Dienes: Selective Synthesis of Adipates and Other Aliphatic Diesters. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 9527-9533.	13.8	26
92	CO Adsorption on Fe ₄ C (100), (110), and (111) Surfaces in Fischer-Tropsch Synthesis. <i>Journal of Physical Chemistry C</i> , 2008, 112, 19018-19029.	3.1	25
93	Density functional theory study into H ₂ O dissociative adsorption on the Fe ₅ C ₂ (010) surface. <i>Applied Catalysis A: General</i> , 2013, 468, 370-383.	4.3	25
94	Mechanisms of H ₂ O and CO ₂ Formation from Surface Oxygen Reduction on Co(0001). <i>Journal of Physical Chemistry C</i> , 2016, 120, 19265-19270.	3.1	25
95	Mechanism of Graphene Formation via Detonation Synthesis: A DFTB Nanoreactor Approach. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 3654-3665.	5.3	25
96	Surface morphology of orthorhombic Mo ₂ C catalyst and high coverage hydrogen adsorption. <i>Surface Science</i> , 2016, 651, 195-202.	1.9	23
97	Structures of seven molybdenum surfaces and their coverage dependent hydrogen adsorption. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 6005-6012.	2.8	23
98	Reaction of CO, H ₂ O, H ₂ and CO ₂ on the clean as well as O, OH and H precovered Fe(100) and Fe(111) surfaces. <i>Catalysis Science and Technology</i> , 2017, 7, 427-440.	4.1	22
99	Toward Green Acylation of (Hetero)arenes: Palladium-Catalyzed Carbonylation of Olefins to Ketones. <i>ACS Central Science</i> , 2018, 4, 30-38.	11.3	22
100	Kinetics and thermodynamics of polymethylbenzene formation over zeolites with different pore sizes for understanding the mechanisms of methanol to olefin conversion – a computational study. <i>Catalysis Science and Technology</i> , 2016, 6, 5326-5335.	4.1	21
101	Mechanistic Aspects of CO Activation and C-C Bond Formation on the Fe/C- and Fe-Terminated Fe ₃ C(010) Surfaces. <i>ACS Catalysis</i> , 2020, 10, 877-890.	11.2	21
102	Density functional theory study of H ₂ adsorption on the (100), (001) and (010) surfaces of Fe ₃ C. <i>Journal of Molecular Catalysis A</i> , 2008, 292, 14-20.	4.8	20
103	Visiting the Limits between a Highly Strained 1-Zirconacyclobutene and Chemically Robust Dizirconacyclooctatetraene. <i>Chemistry - A European Journal</i> , 2018, 24, 5667-5674.	3.3	20
104	Visiting CH ₄ formation and C1-C1 couplings to tune CH ₄ selectivity on Fe surfaces. <i>Journal of Catalysis</i> , 2019, 372, 217-225.	6.2	19
105	Mechanisms of H- and OH-assisted CO activation as well as C-C coupling on the flat Co(0001) surface – revisited. <i>Catalysis Science and Technology</i> , 2016, 6, 8336-8343.	4.1	18
106	Determining the structures, acidity and adsorption properties of Al substituted HZSM-5. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 18758-18768.	2.8	18
107	Coverage dependent adsorption and co-adsorption of CO and H ₂ on the CdI ₂ -antitype metallic Mo ₂ C(001) surface. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 1907-1917.	2.8	17
108	The Facile Dissociation of Carbon-Oxygen Bonds in CO ₂ and CO on the Surface of LaCoSiH _x Intermetallic Compound. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 25538-25545.	13.8	17

#	ARTICLE	IF	CITATIONS
109	Regiodivergent Reductive Opening of Epoxides by Catalytic Hydrogenation Promoted by a (Cyclopentadienone)iron Complex. <i>ACS Catalysis</i> , 2022, 12, 235-246.	11.2	17
110	Potassium promotion on CO hydrogenation on the $\sqrt{3}\times\sqrt{3}$ -Fe ₅ C ₂ (111) surface with carbon vacancy. <i>Applied Catalysis A: General</i> , 2017, 534, 22-29.	4.3	16
111	About copper promotion in CH ₄ formation from CO hydrogenation on Fe(100): A density functional theory study. <i>Applied Catalysis A: General</i> , 2017, 530, 83-92.	4.3	16
112	Benzyl Alcohol Dehydrogenative Coupling Catalyzed by Defined Mn and Re PNP Pincer Complexes – A Computational Mechanistic Study. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 4643-4657.	2.0	16
113	About the Inversion Barriers of π -Chirogenic Triaryl-Substituted Phosphanes. <i>European Journal of Organic Chemistry</i> , 2018, 2018, 2984-2994.	2.4	16
114	Molybdenum carbide supported metal catalysts (M _n /Mo _x C; M = Co, Ni, Cu, Pd,) <i>Tj ETQq0 0 0 rgBT /Overlock 1</i> 3029-3046.	4.1	15
115	Pyrimidopteridine-Catalyzed Hydroamination of Stilbenes with Primary Amines: A Dual Photoredox and Hydrogen Atom Transfer Catalyst. <i>ACS Catalysis</i> , 2021, 11, 4862-4869.	11.2	15
116	Acetylene Hydroformylation with HCo(CO) ₃ as Catalyst. A Density Functional Study. <i>Organometallics</i> , 2004, 23, 765-773.	2.3	14
117	Adsorption and energetics of H ₂ O molecules and O atoms on the $\sqrt{3}\times\sqrt{3}$ -Fe ₅ C ₂ (111), ($\sqrt{3}\times\sqrt{3}$) and (001) surfaces from DFT. <i>Applied Catalysis A: General</i> , 2014, 475, 186-194.	4.3	14
118	Adsorption Structures and Energies of Cu _n Clusters on the Fe(110) and Fe ₃ C(001) Surfaces. <i>Journal of Physical Chemistry C</i> , 2014, 118, 21963-21974.	3.1	14
119	Surface Morphology of Cu Adsorption on Different Terminations of the $\sqrt{3}\times\sqrt{3}$ Iron Carbide ($\sqrt{3}\times\sqrt{3}$ -Fe ₅ C ₂) Phase. <i>Journal of Physical Chemistry C</i> , 2015, 119, 7371-7385.	3.1	14
120	Redox-Disproportionation of a Decamethyltitanocene(III) Isonitrile Alkynyl Complex. <i>Chemistry - A European Journal</i> , 2017, 23, 7891-7895.	3.3	14
121	Iron-PNP-Pincer-Catalyzed Transfer Dehydrogenation of Secondary Alcohols. <i>ChemSusChem</i> , 2019, 12, 2988-2993.	6.8	14
122	Manganese PNP-pincer catalyzed isomerization of allylic/homo-allylic alcohols to ketones – activity, selectivity, efficiency. <i>Catalysis Science and Technology</i> , 2019, 9, 6327-6334.	4.1	14
123	Hydrocracking of Fused Aromatic Hydrocarbons Catalyzed by Al-Substituted HZSM-5 – A Case Study of 9,10-Dihydroanthracene. <i>ACS Catalysis</i> , 2020, 10, 9215-9226.	11.2	13
124	Zirconium-hydride-catalyzed site-selective hydroboration of amides for the synthesis of amines: Mechanism, scope, and application. <i>Chinese Journal of Catalysis</i> , 2021, 42, 2059-2067.	14.0	13
125	Bifunctional aliphatic PNP pincer catalysts for hydrogenation: Mechanisms and scope. <i>Advances in Inorganic Chemistry</i> , 2019, 73, 323-384.	1.0	13
126	How far away are iron carbide clusters from the bulk?. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 32944-32951.	2.8	12

#	ARTICLE	IF	CITATIONS
127	Mechanisms of CO Activation, Surface Oxygen Removal, Surface Carbon Hydrogenation, and C-C Coupling on the Stepped Fe(710) Surface from Computation. <i>Journal of Physical Chemistry C</i> , 2018, 122, 15505-15519.	3.1	12
128	Nitridation of the metallic Mo2C(001) surface from NH3 dissociative adsorption—A DFT study. <i>Surface Science</i> , 2019, 689, 121466.	1.9	12
129	Fe(II) Hydride Complexes for the Homogeneous Dehydrocoupling of Hydrazine Borane: Catalytic Mechanism via DFT Calculations and Detailed Spectroscopic Characterization. <i>Organometallics</i> , 2019, 38, 2714-2723.	2.3	12
130	High-Coverage CO Adsorption and Dissociation on Ir(111), Ir(100), and Ir(110) from Computations. <i>Journal of Physical Chemistry C</i> , 2019, 123, 6487-6495.	3.1	12
131	Structures and energies of Cu clusters on Fe and Fe ₃ C surfaces from density functional theory computation. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 26997-27011.	2.8	11
132	Hydrogenation of phenyl-substituted C≡N, C≡N, C≡C, C≡C and C≡O functional groups by Cr, Mo and W PNP pincer complexes—a DFT study. <i>Catalysis Science and Technology</i> , 2017, 7, 2298-2307.	4.1	11
133	Mechanism of coverage dependent CO adsorption and dissociation on the Mo(100) surface. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 2186-2192.	2.8	11
134	Successive Dissociation of CO, CH ₄ , C ₂ H ₆ , and CH ₃ CHO on Fe(110): Retrosynthetic Understanding of FTS Mechanism. <i>Journal of Physical Chemistry C</i> , 2018, 122, 28846-28855.	3.1	11
135	A recyclable CoGa intermetallic compound catalyst for the hydroformylation reaction. <i>Journal of Catalysis</i> , 2021, 404, 244-249.	6.2	11
136	Mechanistic insight into CO activation, methanation and C-C bond formation from coverage dependent CO hydrogenation on Fe(110). <i>Surface Science</i> , 2019, 689, 121456.	1.9	10
137	Synthesis of Phosphinines from Co ^{II} -Catalyzed [2+2+2] Cycloaddition Reactions. <i>ACS Catalysis</i> , 2021, 11, 13434-13444.	11.2	10
138	Titanocene Silylpropyne Complexes: Promising Intermediates en route to a Four-Membered Metallacyclobutane _{2,3} diene?. <i>Chemistry - A European Journal</i> , 2017, 23, 14158-14162.	3.3	9
139	Molecular or dissociative adsorption of water on clean and oxygen pre-covered Ni(111) surfaces. <i>Catalysis Science and Technology</i> , 2019, 9, 199-212.	4.1	9
140	CO Self-Promoting Hydrogenation on CO-Saturated Ru(0001): A New Theoretical Insight into How H ₂ Participates in CO Activation. <i>Journal of Physical Chemistry C</i> , 2019, 123, 6508-6515.	3.1	9
141	Mechanisms of Co ^{II} and Acid Jointly Catalyzed Domino Conversion of CO ₂ , H ₂ , and CH ₃ OH to Dialkoxymethane: A DFT Study. <i>ACS Catalysis</i> , 2021, 11, 6908-6919.	11.2	9
142	Adsorption and dissociation of H ₂ O and CO ₂ on the clean and O-pre-covered Ru(0001) surface. <i>Applied Catalysis A: General</i> , 2017, 540, 31-36.	4.3	8
143	Exploring the activities of vanadium, niobium, and tantalum PNP pincer complexes in the hydrogenation of phenyl-substituted CN, CN, CC, CC, and CO functional groups. <i>Comptes Rendus Chimie</i> , 2018, 21, 303-309.	0.5	8
144	Coverage dependent structure and energy of water dissociative adsorption on clean and O-pre-covered Ni(100) and Ni(110). <i>Catalysis Science and Technology</i> , 2019, 9, 4725-4743.	4.1	8

#	ARTICLE	IF	CITATIONS
145	Hydrogen Adsorption on Ir(111), Ir(100) and Ir(110)â€”Surface and Coverage Dependence. <i>Surface Science</i> , 2020, 692, 121514.	1.9	8
146	Versatile Fluorinated Building Blocks by Stereoselective (Per)fluoroalkenylation of Ketones. <i>European Journal of Organic Chemistry</i> , 2020, 2020, 70-81.	2.4	8
147	Dehydropolymerisation of methylamine borane using highly active rhodium(<i>iii</i>) bis(thiophosphinite) pincer complexes: catalytic and mechanistic insights. <i>Catalysis Science and Technology</i> , 2021, 11, 3514-3526.	4.1	8
148	Cycloaddition mechanisms of CO ₂ and epoxide catalyzed by salophen â€” an organocatalyst free from metals and halides. <i>Catalysis Science and Technology</i> , 2021, 11, 2529-2539.	4.1	8
149	Zirconiumâ€Catalyzed Atomâ€Economical Synthesis of 1,1â€Diborylalkanes from Terminal and Internal Alkenes. <i>Angewandte Chemie</i> , 2020, 132, 13710-13714.	2.0	7
150	A General and Highly Selective Palladiumâ€Catalyzed Hydroamidation of 1,3â€Diyne. <i>Angewandte Chemie</i> , 2021, 133, 375-383.	2.0	7
151	Revisiting Oxygen Adsorption on Ir(100). <i>Journal of Physical Chemistry C</i> , 2022, 126, 10035-10044.	3.1	7
152	Oxidation of the hexagonal Mo ₂ C(101) surface by H ₂ O dissociative adsorption. <i>Catalysis Science and Technology</i> , 2017, 7, 2789-2797.	4.1	6
153	Surface Carbon Hydrogenation on Precovered Fe(110) with Spectator-Coverage-Dependent Chain Initiation and Propagation. <i>Journal of Physical Chemistry C</i> , 2019, 123, 25657-25667.	3.1	6
154	CpCo(<i>i</i>) pincer catalysts for [2 + 2 + 2] cycloaddition reactions: synthesis and reactivity. <i>Catalysis Science and Technology</i> , 2020, 10, 8005-8014.	4.1	6
155	Coverage-Dependent Water Dissociative Adsorption Properties on Nickel Surfaces. <i>Journal of Physical Chemistry C</i> , 2020, 124, 25835-25845.	3.1	6
156	Catalytic Activity of Aliphatic PNP Ligated Co ^{III} Amine and Amido Complexes in Hydrogenation Reactionâ€”Structure, Stability, and Substrate Dependence. <i>ACS Catalysis</i> , 2021, 11, 4593-4605.	11.2	6
157	Catalytic and mechanistic studies of a highly active and <i>E</i> -selective Co(<i>ii</i>) PNN ^H pincer catalyst system for transfer-semihydrogenation of internal alkynes. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 761-770.	6.0	5
158	(<i>In situ</i>) spectroscopic studies on state-of-the-art Pd(<i>ii</i>) catalysts in solution for the alkoxy carbonylation of alkenes. <i>Catalysis Science and Technology</i> , 2022, 12, 3175-3189.	4.1	5
159	Reply to â€œComment on â€”Density Functional Theory Study of Triangular Molybdenum Sulfide Nanocluster and CO Adsorption on Itâ€” <i>Journal of Physical Chemistry B</i> , 2006, 110, 14004-14005.	2.6	4
160	Mechanisms and Activity of 1â€Phenylethanol Dehydrogenation Catalyzed by Bifunctional NHCâ€Ir ^{III} Complex. <i>European Journal of Organic Chemistry</i> , 2019, 2019, 3929-3936.	2.4	4
161	Interactive network of the dehydrogenation of alkanes, alkenes and alkynes â€” surface carbon hydrogenative coupling on Ru(111). <i>Catalysis Science and Technology</i> , 2021, 11, 191-210.	4.1	4
162	Efficient Palladiumâ€Catalyzed Carbonylation of 1,3â€Dienes: Selective Synthesis of Adipates and Other Aliphatic Diesters. <i>Angewandte Chemie</i> , 2021, 133, 9613-9619.	2.0	4

#	ARTICLE	IF	CITATIONS
163	Simple mechanisms of CH ₄ reforming with CO ₂ and H ₂ O on a supported Ni/ZrO ₂ catalyst. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 26392-26400.	2.8	4
164	Base-Mediated Remote Deuteration of <i>N</i> -Heteroarenes – Broad Scope and Mechanism. <i>European Journal of Organic Chemistry</i> , 0, , .	2.4	4
165	Exploring the mechanism of alkene hydrogenation catalyzed by defined iron complex from DFT computation. <i>Journal of Molecular Modeling</i> , 2019, 25, 61.	1.8	3
166	Adsorption of CO, H ₂ , H ₂ O, and CO ₂ on Fe-, Co-, Ni-, Cu-, Pd-, and Pt-Doped Mo ₂ C(101) Surfaces. <i>Journal of Physical Chemistry C</i> , 2021, 125, 11419-11431.	3.1	3
167	Dissociative adsorption of H ₂ O and CO ₂ on the clean and O-pre-covered high index Ru surfaces: Corrugated Ru(11 $\bar{1}$ 21) and stepped Ru(20 $\bar{2}$ 1) surfaces. <i>Surface Science</i> , 2022, 715, 121936.	1.9	3
168	Surface hydroxyl dependent adsorption of ruthenium on SiO ₂ (0 0 1) – Understanding metal-support interaction. <i>Applied Surface Science</i> , 2022, 593, 153396.	6.1	3
169	Mechanisms of CO ₂ hydrogenative conversion on supported Ni/ZrO ₂ catalyst. <i>Applied Surface Science</i> , 2022, 600, 154151.	6.1	3
170	Exploring the Chemoselective Dehydrogenative Silylation and Hydrogenation of Divinyldisiloxane with Hydrosilane from DFT Computation. <i>European Journal of Organic Chemistry</i> , 2018, 2018, 1993-1999.	2.4	2
171	Exploring direct and hydrogen-assisted CO activation on iridium surfaces – surface dependent activity. <i>Catalysis Science and Technology</i> , 2020, 10, 4424-4435.	4.1	2
172	Reduction Over Condensation of Carbonyl Compounds Through a Transient Hemiaminal Intermediate Using Hydrazine. <i>Journal of Organic Chemistry</i> , 2020, 85, 9213-9218.	3.2	2
173	Mechanistic Insights into the Chemo-selective Dehydrogenative Silylation of Alkenes Catalyzed by Bis(imino)pyridine Cobalt Complex from DFT Computations. <i>ChemCatChem</i> , 2020, 12, 3890-3899.	3.7	2
174	Nonoxidative Conversion of Methane, Ethane, and Ethylene on Flat Ir(111) and Stepped Ir(211) Surfaces. <i>Journal of Physical Chemistry C</i> , 2021, 125, 5602-5615.	3.1	1
175	Unraveling the Synergetic Effect of the FeO _x -Cu Model System in Catalyzing the Water-Gas Shift Reaction. <i>Journal of Physical Chemistry C</i> , 2022, 126, 6241-6248.	3.1	1
176	The Facile Dissociation of Carbon-Oxygen Bonds in CO ₂ and CO on the Surface of LaCoSiH Intermetallic Compound. <i>Angewandte Chemie</i> , 2021, 133, 25742-25749.	2.0	0