

Donghai Mei

List of Publications by Year in descending order

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papers

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#	ARTICLE	IF	CITATIONS
1	Synergistic effect of the metal-support interaction and interfacial oxygen vacancy for CO ₂ hydrogenation to methanol over Ni/In ₂ O ₃ catalyst: A theoretical study. <i>Journal of Energy Chemistry</i> , 2022, 65, 623-629.	7.1	51
2	Artificial Neural Network Potential for Encapsulated Platinum Clusters in MOF-808. <i>Journal of Physical Chemistry C</i> , 2022, 126, 1204-1214.	1.5	10
3	Effects of hydroxylation on the acidic and basic strengths of anatase TiO ₂ surfaces. <i>Molecular Simulation</i> , 2022, 48, 829-843.	0.9	2
4	Copper Phyllosilicate Nanotube Catalysts for the Chemosynthesis of Cyclohexane via Hydrodeoxygenation of Phenol. <i>ACS Catalysis</i> , 2022, 12, 4724-4736.	5.5	35
5	Size-dependent electron injection over sensitized semiconductor heterojunctions for enhanced photocatalytic hydrogen production. <i>Applied Catalysis B: Environmental</i> , 2022, 308, 121218.	10.8	28
6	Mechanistic understanding of methane combustion over H-SSZ-13 zeolite encapsulated palladium nanocluster catalysts. <i>Chemical Engineering Journal</i> , 2022, 444, 136671.	6.6	8
7	Covalent triazine framework encapsulated Pd nanoclusters for efficient hydrogen production via ammonia borane hydrolysis. <i>Journal of Catalysis</i> , 2022, 411, 72-83.	3.1	27
8	Solar-Boosted Paper-Based Microfluidic Fuel Cells for Miniaturized Power Sources. <i>Advanced Materials Technologies</i> , 2022, 7, .	3.0	4
9	CO Oxidation over HKUST-1 Catalysts: The Role of Defective Sites. <i>Journal of Physical Chemistry C</i> , 2022, 126, 9652-9664.	1.5	2
10	Distinct Role of Surface Hydroxyls in Single-Atom Pt ₁ /CeO ₂ Catalyst for Room-Temperature Formaldehyde Oxidation: Acid-Base Versus Redox. <i>Jacs Au</i> , 2022, 2, 1651-1660.	3.6	25
11	Unveiling Secondary-Ion-Promoted Catalytic Properties of Cu-SSZ-13 Zeolites for Selective Catalytic Reduction of NO _x . <i>Journal of the American Chemical Society</i> , 2022, 144, 12816-12824.	6.6	51
12	Elucidation of Active Sites in Aldol Condensation of Acetone over Single-Facet Dominant Anatase TiO ₂ (101) and (001) Catalysts. <i>Jacs Au</i> , 2021, 1, 41-52.	3.6	26
13	Insights into protonation for cyclohexanol/water mixtures at the zeolitic Brønsted acid site. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 10395-10401.	1.3	4
14	Highly Active Ir/In ₂ O ₃ Catalysts for Selective Hydrogenation of CO ₂ to Methanol: Experimental and Theoretical Studies. <i>ACS Catalysis</i> , 2021, 11, 4036-4046.	5.5	108
15	Density Functional Theory Study on the Morphology Evolution of Hydroxylated β -Cristobalite Silica and Desilication in the Presence of Methanol. <i>Journal of Physical Chemistry C</i> , 2021, 125, 7868-7879.	1.5	6
16	Structural and Hydrolytic Stability of Coordinatively Unsaturated Metal-Organic Frameworks M ₃ (BTC) ₂ (M = Cu, Co, Mn, Ni, and Zn): A Combined DFT and Experimental Study. <i>Journal of Physical Chemistry C</i> , 2021, 125, 5832-5847.	1.5	11
17	Rational Design of Synergistic Active Sites for Catalytic Ethene/2-Butene Cross-Metathesis in a Rhenium-Doped Y Zeolite Catalyst. <i>ACS Catalysis</i> , 2021, 11, 3530-3540.	5.5	9
18	A theoretical study of propionic acid decarboxylation over hydroxyapatite supported platinum catalysts. <i>Catalysis Today</i> , 2021, 365, 181-192.	2.2	6

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19	Quasi-Solid-State Li ⁺ O ₂ Batteries Performance Enhancement Using an Integrated Composite Polymer-Based Architecture. ACS Applied Energy Materials, 2021, 4, 6221-6232.	2.5	8
20	Polymer-supported ultra-thin ZIF-67 membrane through in situ interface self-repair. Journal of Membrane Science, 2021, 625, 119139.	4.1	45
21	Steam Etched Construction of Hierarchically Porous Metal-Organic Frameworks. Chinese Journal of Chemistry, 2021, 39, 1538-1544.	2.6	13
22	Theoretical Insights into CO Oxidation over MOF-808-Encapsulated Single-Atom Metal Catalysts. Journal of Physical Chemistry C, 2021, 125, 17097-17108.	1.5	19
23	Understanding the Effects of Water Molecules on Cyclohexanol Dehydration over Zeolitic Acid Sites. Journal of Physical Chemistry C, 2021, 125, 15283-15291.	1.5	5
24	Self-adaptive dual-metal-site pairs in metal-organic frameworks for selective CO ₂ photoreduction to CH ₄ . Nature Catalysis, 2021, 4, 719-729.	16.1	406
25	Morphology controlled synthesis of Fe _{1-x} Fe ₂ O _{3-x} with benzimidazole-modified Fe-MOFs for enhanced photo-Fenton-like catalysis. Applied Catalysis B: Environmental, 2021, 291, 120129.	10.8	105
26	Isomeric La ⁺ La ⁺ Zr ⁺ O Amorphous-Crystalline Composite Thin-Film Electrolytes for All-Solid-State Lithium Batteries. ACS Applied Energy Materials, 2021, 4, 8517-8528.	2.5	7
27	Water: A promoter of ammonia selective catalytic reduction over copper-exchanged LTA zeolites. Applied Catalysis B: Environmental, 2021, 294, 120244.	10.8	20
28	Theoretical characterization of zeolite encapsulated platinum clusters in the presence of water molecules. Physical Chemistry Chemical Physics, 2021, 23, 23360-23371.	1.3	5
29	Dealumination of the H-BEA Zeolite via the S ₂ N ₂ Mechanism: A Theoretical Investigation. Journal of Physical Chemistry C, 2021, 125, 24613-24621.	1.5	6
30	Copper-Based Catalysts Confined in Carbon Nanocage Reactors for Condensed Ester Hydrogenation: Tuning Copper Species by Confined SiO ₂ and Methanol Resistance. ACS Sustainable Chemistry and Engineering, 2021, 9, 16270-16280.	3.2	8
31	Thermodynamic and kinetic roles of H ₂ in structure evolution of urchin-like Co: A density functional theory study. Particuology, 2020, 48, 2-12.	2.0	2
32	The Critical Role of Reductive Steps in the Nickel-Catalyzed Hydrogenolysis and Hydrolysis of Aryl Ether C-O Bonds. Angewandte Chemie - International Edition, 2020, 59, 1445-1449.	7.2	40
33	The Critical Role of Reductive Steps in the Nickel-Catalyzed Hydrogenolysis and Hydrolysis of Aryl Ether C-O Bonds. Angewandte Chemie, 2020, 132, 1461-1465.	1.6	6
34	Reversible Electrochemical Interface of Mg Metal and Conventional Electrolyte Enabled by Intermediate Adsorption. ACS Energy Letters, 2020, 5, 200-206.	8.8	44
35	Aqueous Phase Aldol Condensation of Formaldehyde and Acetone on Anatase TiO ₂ (101) Surface: A Theoretical Investigation. ChemCatChem, 2020, 12, 1220-1229.	1.8	15
36	Theoretical Insights into the Initial Hydrolytic Breakdown of HKUST-1. Journal of Physical Chemistry C, 2020, 124, 1991-2001.	1.5	30

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37	A density functional theoretical study on the stability of Pt clusters in MOF-808. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 23645-23656.	1.3	6
38	Ultrathin Low- κ Crystallinity MOF Membranes Fabricated by Interface Layer Polarization Induction. <i>Advanced Materials</i> , 2020, 32, e2002165.	11.1	85
39	Identifying Free Energy Landscapes of Proton-Transfer Processes between Brønsted Acid Sites and Water Clusters Inside the Zeolite Pores. <i>Journal of Physical Chemistry C</i> , 2020, 124, 22568-22576.	1.5	20
40	Metal-Free 2D/2D Black Phosphorus and Covalent Triazine Framework Heterostructure for CO ₂ Photoreduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 5175-5183.	3.2	74
41	Single-Facet Dominant Anatase TiO ₂ (101) and (001) Model Catalysts to Elucidate the Active Sites for Alkanol Dehydration. <i>ACS Catalysis</i> , 2020, 10, 4268-4279.	5.5	32
42	Single-Atom Pt ^{IV} Sites on the Stable Covalent Triazine Framework Nanosheets for Photocatalytic N ₂ Fixation. <i>ACS Catalysis</i> , 2020, 10, 2431-2442.	5.5	171
43	The shuttling mechanism of foldaxanes: more than just translocation and rotation. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 12967-12972.	1.3	3
44	Stable and size-controllable ultrafine Pt nanoparticles derived from a MOF-based single metal ion trap for efficient electrocatalytic hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2019, 7, 20239-20246.	5.2	29
45	Metal-organic framework encapsulated single-atom Pt catalysts for efficient photocatalytic hydrogen evolution. <i>Journal of Catalysis</i> , 2019, 375, 351-360.	3.1	86
46	Revisiting effects of alkali metal and alkaline earth co-cation additives to Cu/SSZ-13 selective catalytic reduction catalysts. <i>Journal of Catalysis</i> , 2019, 378, 363-375.	3.1	59
47	Effects of Local Water Concentrations on Cyclohexanol Dehydration in H-BEA Zeolites. <i>Journal of Physical Chemistry C</i> , 2019, 123, 25255-25266.	1.5	40
48	Genesis and Stability of Hydronium Ions in Zeolite Channels. <i>Journal of the American Chemical Society</i> , 2019, 141, 3444-3455.	6.6	119
49	The OH ⁻ -driven synthesis of Pt ^{IV} -Ni nanocatalysts with atomic segregation for alkaline hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 5475-5481.	5.2	46
50	Constructing Robust Electrode/Electrolyte Interphases to Enable Wide Temperature Applications of Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 21496-21505.	4.0	44
51	Self-smoothing anode for achieving high-energy lithium metal batteries under realistic conditions. <i>Nature Nanotechnology</i> , 2019, 14, 594-601.	15.6	451
52	High-Concentration Ether Electrolytes for Stable High-Voltage Lithium Metal Batteries. <i>ACS Energy Letters</i> , 2019, 4, 896-902.	8.8	302
53	Unraveling the mysterious failure of Cu/SAPO-34 selective catalytic reduction catalysts. <i>Nature Communications</i> , 2019, 10, 1137.	5.8	99
54	Simultaneous Activation of CH ₄ and CO ₂ for Concerted C-C Coupling at Oxide-Oxide Interfaces. <i>ACS Catalysis</i> , 2019, 9, 3187-3197.	5.5	56

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55	Mechanistic insight into the passive NO _x adsorption in the highly dispersed Pd/HBEA zeolite. <i>Applied Catalysis A: General</i> , 2019, 569, 181-189.	2.2	55
56	Where Does the Sulphur Go? Deactivation of a Low Temperature CO Oxidation Catalyst by Sulphur Poisoning. <i>Catalysis Letters</i> , 2018, 148, 1445-1450.	1.4	3
57	Entrapped Single Tungstate Site in Zeolite for Cooperative Catalysis of Olefin Metathesis with Brønsted Acid Site. <i>Journal of the American Chemical Society</i> , 2018, 140, 6661-6667.	6.6	71
58	A theoretical study on reaction mechanisms and kinetics of thiophene hydrodesulfurization over MoS ₂ catalysts. <i>Catalysis Today</i> , 2018, 312, 158-167.	2.2	25
59	Theoretical Investigation of the Structural Stabilities of Ceria Surfaces and Supported Metal Nanocluster in Vapor and Aqueous Phases. <i>Journal of Physical Chemistry C</i> , 2018, 122, 4828-4840.	1.5	26
60	Effects of Imide-Orthoborate Dual-Salt Mixtures in Organic Carbonate Electrolytes on the Stability of Lithium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 2469-2479.	4.0	110
61	Mechanistic Effects of Water on the Fe-Catalyzed Hydrodeoxygenation of Phenol. The Role of Brønsted Acid Sites. <i>ACS Catalysis</i> , 2018, 8, 2200-2208.	5.5	50
62	High-Voltage Lithium-Metal Batteries Enabled by Localized High-Concentration Electrolytes. <i>Advanced Materials</i> , 2018, 30, e1706102.	11.1	761
63	Aqueous-Phase Acetic Acid Ketonization over Monoclinic Zirconia. <i>ACS Catalysis</i> , 2018, 8, 488-502.	5.5	32
64	Nucleation of Cu _n (<i>n</i> = 1-5) Clusters and Equilibrium Morphology of Cu Particles Supported on CeO ₂ Surface: A Density Functional Theory Study. <i>Journal of Physical Chemistry C</i> , 2018, 122, 27402-27411.	1.5	15
65	Mechanisms of Semiconducting 2H to Metallic 1T Phase Transition in Two-dimensional MoS ₂ Nanosheets. <i>Journal of Physical Chemistry C</i> , 2018, 122, 28215-28224.	1.5	65
66	Multifunctional Pd-Sn electrocatalysts enabled by in situ formed SnO _x and TiC triple junctions. <i>Nano Energy</i> , 2018, 53, 940-948.	8.2	33
67	Dynamic modification of pore opening of SAPO-34 by adsorbed surface methoxy species during induction of catalytic methanol-to-olefins reactions. <i>Applied Catalysis B: Environmental</i> , 2018, 237, 245-250.	10.8	18
68	Lithium-Metal Batteries: High-Voltage Lithium-Metal Batteries Enabled by Localized High-Concentration Electrolytes (<i>Adv. Mater.</i> 21/2018). <i>Advanced Materials</i> , 2018, 30, 1870144.	11.1	4
69	Stable cycling of high-voltage lithium metal batteries in ether electrolytes. <i>Nature Energy</i> , 2018, 3, 739-746.	19.8	767
70	Hydrolysis of zeolite framework aluminum and its impact on acid catalyzed alkane reactions. <i>Journal of Catalysis</i> , 2018, 365, 359-366.	3.1	47
71	Monitoring the methanol conversion process in H-ZSM-5 using synchrotron X-ray powder diffraction-mass spectrometry. <i>Journal of Catalysis</i> , 2018, 365, 145-152.	3.1	12
72	Localized High-Concentration Sulfone Electrolytes for High-Efficiency Lithium-Metal Batteries. <i>CheM</i> , 2018, 4, 1877-1892.	5.8	628

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73	Stabilization of Li Metal Anode in DMSO-Based Electrolytes via Optimization of Salt Solvent Coordination for O_2 Batteries. <i>Advanced Energy Materials</i> , 2017, 7, 1602605.	10.2	99
74	Electrolyte additive enabled fast charging and stable cycling lithium metal batteries. <i>Nature Energy</i> , 2017, 2, .	19.8	1,048
75	Enhancing the catalytic activity of hydronium ions through constrained environments. <i>Nature Communications</i> , 2017, 8, 14113.	5.8	94
76	Mechanism of Phenol Alkylation in Zeolite H-BEA Using In Situ Solid-State NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2017, 139, 9178-9185.	6.6	56
77	Selective Catalytic Reduction over Cu/SSZ-13: Linking Homo- and Heterogeneous Catalysis. <i>Journal of the American Chemical Society</i> , 2017, 139, 4935-4942.	6.6	380
78	Competitive Adsorption-Assisted Formation of One-Dimensional Cobalt Nanochains with High CO Hydrogenation Activity. <i>Journal of Physical Chemistry C</i> , 2017, 121, 24588-24593.	1.5	8
79	Hydronium-Ion-Catalyzed Elimination Pathways of Substituted Cyclohexanols in Zeolite H-ZSM5. <i>ACS Catalysis</i> , 2017, 7, 7822-7829.	5.5	22
80	Tracking the Chemical Transformations at the Brønsted Acid Site upon Water-Induced Deprotonation in a Zeolite Pore. <i>Chemistry of Materials</i> , 2017, 29, 9030-9042.	3.2	71
81	Controlling Solid-Liquid Conversion Reactions for a Highly Reversible Aqueous Zinc-Iodine Battery. <i>ACS Energy Letters</i> , 2017, 2, 2674-2680.	8.8	207
82	Hierarchical Porous NC@CuCo Nitride Nanosheet Networks: Highly Efficient Bifunctional Electrocatalyst for Overall Water Splitting and Selective Electrooxidation of Benzyl Alcohol. <i>Advanced Functional Materials</i> , 2017, 27, 1704169.	7.8	267
83	Toward Rational Design of Cu/SSZ-13 Selective Catalytic Reduction Catalysts: Implications from Atomic-Level Understanding of Hydrothermal Stability. <i>ACS Catalysis</i> , 2017, 7, 8214-8227.	5.5	278
84	Steam Reforming of Acetic Acid over Co-Supported Catalysts: Coupling Ketonization for Greater Stability. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 9136-9149.	3.2	25
85	Hydrogen assisted synthesis of branched nickel nanostructures: a combined theoretical and experimental study. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 26718-26727.	1.3	13
86	Activation of surface lattice oxygen in single-atom Pt/CeO ₂ for low-temperature CO oxidation. <i>Science</i> , 2017, 358, 1419-1423.	6.0	1,114
87	A combined experimental and computational study of water-gas shift reaction over rod-shaped Ce _{0.75} Mo _{0.25} O ₂ (M = Ti, Zr, and Mn) supported Cu catalysts. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 30086-30097.	3.8	14
88	Mechanistic insights into aqueous phase propanol dehydration in H-ZSM-5 zeolite. <i>AIChE Journal</i> , 2017, 63, 172-184.	1.8	49
89	Enhanced Cycling Stability of Rechargeable O_2 Batteries Using High-Concentration Electrolytes. <i>Advanced Functional Materials</i> , 2016, 26, 605-613.	7.8	104
90	Highly Stable Operation of Lithium Metal Batteries Enabled by the Formation of a Transient High-Concentration Electrolyte Layer. <i>Advanced Energy Materials</i> , 2016, 6, 1502151.	10.2	236

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91	Effect of the Anion Activity on the Stability of Li Metal Anodes in Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2016, 26, 3059-3066.	7.8	117
92	Enhanced charging capability of lithium metal batteries based on lithium bis(trifluoromethanesulfonyl)imide-lithium bis(oxalato)borate dual-salt electrolytes. <i>Journal of Power Sources</i> , 2016, 318, 170-177.	4.0	186
93	Promotional Effects of Cesium Promoter on Higher Alcohol Synthesis from Syngas over Cesium-Promoted Cu/ZnO/Al ₂ O ₃ Catalysts. <i>ACS Catalysis</i> , 2016, 6, 5771-5785.	5.5	79
94	First-Principles Thermodynamics Study of Spinel MgAl ₂ O ₄ Surface Stability. <i>Journal of Physical Chemistry C</i> , 2016, 120, 19087-19096.	1.5	38
95	Graphene Oxide Catalyzed C-H Bond Activation: The Importance of Oxygen Functional Groups for Biaryl Construction. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 3124-3128.	7.2	129
96	Promotional effect of surface hydroxyls on electrochemical reduction of CO ₂ over SnO/Sn electrode. <i>Journal of Catalysis</i> , 2016, 343, 257-265.	3.1	113
97	Steam Reforming of Ethylene Glycol over MgAl ₂ O ₄ Supported Rh, Ni, and Co Catalysts. <i>ACS Catalysis</i> , 2016, 6, 315-325.	5.5	45
98	Key Roles of Lewis Acid-Base Pairs on Zn _x Zr _y O _z in Direct Ethanol/Acetone to Isobutene Conversion. <i>Journal of the American Chemical Society</i> , 2016, 138, 507-517.	6.6	106
99	Dehydration of 1-Octadecanol over H-BEA: A Combined Experimental and Computational Study. <i>ACS Catalysis</i> , 2016, 6, 878-889.	5.5	16
100	Mechanistic insights into the structure-dependent selectivity of catalytic furfural conversion on platinum catalysts. <i>AIChE Journal</i> , 2015, 61, 3812-3824.	1.8	53
101	Synergistic Effect of Nitrogen in Cobalt Nitride and Nitrogen-Doped Hollow Carbon Spheres for the Oxygen Reduction Reaction. <i>ChemCatChem</i> , 2015, 7, 1826-1832.	1.8	62
102	In Situ Fabrication of PtCo Alloy Embedded in Nitrogen-Doped Graphene Nanopores as Synergistic Catalyst for Oxygen Reduction Reaction. <i>Advanced Materials Interfaces</i> , 2015, 2, 1500365.	1.9	21
103	Surface-Bound Intermediates in Low-Temperature Methanol Synthesis on Copper: Participants and Spectators. <i>ACS Catalysis</i> , 2015, 5, 7328-7337.	5.5	77
104	Dehydration Pathways of 1-Propanol on HZSM-5 in the Presence and Absence of Water. <i>Journal of the American Chemical Society</i> , 2015, 137, 15781-15794.	6.6	110
105	New insights into reaction mechanisms of ethanol steam reforming on Co-ZrO ₂ . <i>Applied Catalysis B: Environmental</i> , 2015, 162, 141-148.	10.8	67
106	Dynamic formation of single-atom catalytic active sites on ceria-supported gold nanoparticles. <i>Nature Communications</i> , 2015, 6, 6511.	5.8	370
107	Effect of graphene with nanopores on metal clusters. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 24420-24426.	1.3	13
108	The Role of Cesium Cation in Controlling Interphasial Chemistry on Graphite Anode in Propylene Carbonate-Rich Electrolytes. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 20687-20695.	4.0	41

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109	Adsorption Kinetics in Nanoscale Porous Coordination Polymers. ACS Applied Materials & Interfaces, 2015, 7, 21712-21716.	4.0	14
110	Dendrite-Free Lithium Deposition with Self-Aligned Nanorod Structure. Nano Letters, 2014, 14, 6889-6896.	4.5	326
111	A comparative study of the adsorption of water and methanol in zeolite BEA: a molecular simulation study. Molecular Simulation, 2014, 40, 1113-1124.	0.9	11
112	Reduction Mechanism of Fluoroethylene Carbonate for Stable Solid-Electrolyte Interphase Film on Silicon Anode. ChemSusChem, 2014, 7, 549-554.	3.6	126
113	A radar-like iron based nanohybrid as an efficient and stable electrocatalyst for oxygen reduction. Journal of Materials Chemistry A, 2014, 2, 6703-6707.	5.2	18
114	Following Solid-Acid-Catalyzed Reactions by MAS NMR Spectroscopy in Liquid Phase-Zeolite-Catalyzed Conversion of Cyclohexanol in Water. Angewandte Chemie - International Edition, 2014, 53, 479-482.	7.2	57
115	Mechanisms of selective cleavage of C-O bonds in di-aryl ethers in aqueous phase. Journal of Catalysis, 2014, 309, 280-290.	3.1	108
116	Mechanisms of catalytic cleavage of benzyl phenyl ether in aqueous and apolar phases. Journal of Catalysis, 2014, 311, 41-51.	3.1	120
117	Geometric and electronic properties of graphene modified by external N-containing groups. Physical Chemistry Chemical Physics, 2014, 16, 20749-20754.	1.3	11
118	Liquid-metal electrode to enable ultra-low temperature sodium-beta alumina batteries for renewable energy storage. Nature Communications, 2014, 5, 4578.	5.8	158
119	A General Mechanism for Stabilizing the Small Sizes of Precious Metal Nanoparticles on Oxide Supports. Chemistry of Materials, 2014, 26, 5475-5481.	3.2	53
120	Methanol synthesis from CO ₂ hydrogenation over a Pd ₄ /In ₂ O ₃ model catalyst: A combined DFT and kinetic study. Journal of Catalysis, 2014, 317, 44-53.	3.1	196
121	First-Principles Study of Phenol Hydrogenation on Pt and Ni Catalysts in Aqueous Phase. Journal of the American Chemical Society, 2014, 136, 10287-10298.	6.6	226
122	Quantitatively Probing the Al Distribution in Zeolites. Journal of the American Chemical Society, 2014, 136, 8296-8306.	6.6	199
123	Effects of potassium doping on CO hydrogenation over MoS ₂ catalysts: A first-principles investigation. Catalysis Communications, 2014, 52, 92-97.	1.6	19
124	Highly active and stable MgAl ₂ O ₄ -supported Rh and Ir catalysts for methane steam reforming: A combined experimental and theoretical study. Journal of Catalysis, 2014, 316, 11-23.	3.1	104
125	Mechanistic studies of methanol synthesis over Cu from CO/CO ₂ /H ₂ /H ₂ O mixtures: The source of C in methanol and the role of water. Journal of Catalysis, 2013, 298, 10-17.	3.1	271
126	State of Supported Pd during Catalysis in Water. Journal of Physical Chemistry C, 2013, 117, 17603-17612.	1.5	43

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127	Vapor Phase Ketonization of Acetic Acid on Ceria Based Metal Oxides. Topics in Catalysis, 2013, 56, 1782-1789.	1.3	33
128	DFT+U Study on the Localized Electronic States and Their Potential Role During H ₂ O Dissociation and CO Oxidation Processes on CeO ₂ (111) Surface. Journal of Physical Chemistry C, 2013, 117, 23082-23089.	1.5	85
129	Stable platinum nanoparticles on specific MgAl ₂ O ₄ spinel facets at high temperatures in oxidizing atmospheres. Nature Communications, 2013, 4, 2481.	5.8	166
130	Structure sensitivity of hydrogenolytic cleavage of endocyclic and exocyclic C-C bonds in methylcyclohexane over supported iridium particles. Journal of Catalysis, 2013, 297, 70-78.	3.1	28
131	First-principles characterization of formate and carboxyl adsorption on stoichiometric CeO ₂ (111) and CeO ₂ (110) surfaces. Journal of Energy Chemistry, 2013, 22, 524-532.	7.1	12
132	Minimizing the Formation of Coke and Methane on Co Nanoparticles in Steam Reforming of Biomass-Derived Oxygenates. ChemCatChem, 2013, 5, 1299-1303.	1.8	34
133	Comparative Investigation of Benzene Steam Reforming over Spinel Supported Rh and Ir Catalysts. ACS Catalysis, 2013, 3, 1133-1143.	5.5	39
134	Active Oxygen Vacancy Site for Methanol Synthesis from CO ₂ Hydrogenation on In ₂ O ₃ (110): A DFT Study. ACS Catalysis, 2013, 3, 1296-1306.	5.5	530
135	First-Principles Characterization of Potassium Intercalation in Hexagonal 2H-MoS ₂ . Journal of Physical Chemistry C, 2012, 116, 1826-1832.	1.5	50
136	Theoretical Study of Syngas Hydrogenation to Methanol on the Polar Zn-Terminated ZnO(0001) Surface. Journal of Physical Chemistry C, 2012, 116, 15952-15961.	1.5	45
137	On the Reaction Mechanism of Acetaldehyde Decomposition on Mo(110). ACS Catalysis, 2012, 2, 468-478.	5.5	16
138	A DFT+U study of structure and reducibility of Ce _n O _{2n+1} (n = 1/2, 1, 3/2, 2) nanoclusters. Computational and Theoretical Chemistry, 2012, 987, 25-31.	1.1	9
139	Size-Dependent Catalytic Performance of CuO on γ-Al ₂ O ₃ : NO Reduction versus NH ₃ Oxidation. ACS Catalysis, 2012, 2, 1432-1440.	5.5	75
140	Effects of cell positive cans and separators on the performance of high-voltage Li-ion batteries. Journal of Power Sources, 2012, 213, 160-168.	4.0	44
141	Functionalized Graphene Sheets as Molecular Templates for Controlled Nucleation and Self-Assembly of Metal Oxide-Graphene Nanocomposites. Advanced Materials, 2012, 24, 5136-5141.	11.1	92
142	The Role of Ir in Ternary Rh-Based Catalysts for Syngas Conversion to C ₂ + Oxygenates. Topics in Catalysis, 2012, 55, 595-600.	1.3	13
143	Ethylene conversion to ethylidyne on Pd(111) and Pt(111): A first-principles-based kinetic Monte Carlo study. Journal of Catalysis, 2012, 285, 187-195.	3.1	66
144	Density Functional Theory Study of Acetaldehyde Hydrodeoxygenation on MoO ₃ . Journal of Physical Chemistry C, 2011, 115, 8155-8164.	1.5	64

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