

Jeffrey T Miller

List of Publications by Year in descending order

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212
papers

17,610
citations

9756

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16127

124
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221
all docs

221
docs citations

221
times ranked

17380
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamic multinuclear sites formed by mobilized copper ions in NO x selective catalytic reduction. <i>Science</i> , 2017, 357, 898-903.	6.0	667
2	Catalysis in a Cage: Condition-Dependent Speciation and Dynamics of Exchanged Cu Cations in SSZ-13 Zeolites. <i>Journal of the American Chemical Society</i> , 2016, 138, 6028-6048.	6.6	588
3	Low-temperature carbon monoxide oxidation catalysed by regenerable atomically dispersed palladium on alumina. <i>Nature Communications</i> , 2014, 5, 4885.	5.8	498
4	High-Density Ultra-small Clusters and Single-Atom Fe Sites Embedded in Graphitic Carbon Nitride ($g\text{-C}_3\text{N}_4$) for Highly Efficient Catalytic Advanced Oxidation Processes. <i>ACS Nano</i> , 2018, 12, 9441-9450.	7.3	455
5	Breaking the scaling relationship via thermally stable Pt/Cu single atom alloys for catalytic dehydrogenation. <i>Nature Communications</i> , 2018, 9, 4454.	5.8	451
6	Engineering single-atomic ruthenium catalytic sites on defective nickel-iron layered double hydroxide for overall water splitting. <i>Nature Communications</i> , 2021, 12, 4587.	5.8	401
7	Size and Support Effects for the Water-Gas Shift Catalysis over Gold Nanoparticles Supported on Model Al_2O_3 and TiO_2 . <i>Journal of the American Chemical Society</i> , 2012, 134, 4700-4708.	6.6	380
8	High-Performance Transition Metal Phosphide Alloy Catalyst for Oxygen Evolution Reaction. <i>ACS Nano</i> , 2018, 12, 158-167.	7.3	321
9	Isolation of the Copper Redox Steps in the Standard Selective Catalytic Reduction on Cu-SSZ-13. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 11828-11833.	7.2	305
10	Cleavage and hydrodeoxygenation (HDO) of C-O bonds relevant to lignin conversion using Pd/Zn synergistic catalysis. <i>Chemical Science</i> , 2013, 4, 806-813.	3.7	294
11	Identification of the active Cu site in standard selective catalytic reduction with ammonia on Cu-SSZ-13. <i>Journal of Catalysis</i> , 2014, 312, 87-97.	3.1	286
12	A pyridinic Fe-N4 macrocycle models the active sites in Fe/N-doped carbon electrocatalysts. <i>Nature Communications</i> , 2020, 11, 5283.	5.8	286
13	Sintering-Resistant Single-Site Nickel Catalyst Supported by Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2016, 138, 1977-1982.	6.6	273
14	Reactive metal-support interactions at moderate temperature in two-dimensional niobium-carbide-supported platinum catalysts. <i>Nature Catalysis</i> , 2018, 1, 349-355.	16.1	244
15	Atomically precise single-crystal structures of electrically conducting 2D metal-organic frameworks. <i>Nature Materials</i> , 2021, 20, 222-228.	13.3	239
16	Ensemble Effect in Bimetallic Electrocatalysts for CO_2 Reduction. <i>Journal of the American Chemical Society</i> , 2019, 141, 16635-16642.	6.6	238
17	Stabilizing High Metal Loadings of Thermally Stable Platinum Single Atoms on an Industrial Catalyst Support. <i>ACS Catalysis</i> , 2019, 9, 3978-3990.	5.5	233
18	Propylene Hydrogenation and Propane Dehydrogenation by a Single-Site Zn^{2+} on Silica Catalyst. <i>ACS Catalysis</i> , 2014, 4, 1091-1098.	5.5	230

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19	Nanoceria-Supported Single-Atom Platinum Catalysts for Direct Methane Conversion. ACS Catalysis, 2018, 8, 4044-4048.	5.5	214
20	Insights into Nitrate Reduction over Indium-Decorated Palladium Nanoparticle Catalysts. ACS Catalysis, 2018, 8, 503-515.	5.5	188
21	Two-dimensional transition metal carbides as supports for tuning the chemistry of catalytic nanoparticles. Nature Communications, 2018, 9, 5258.	5.8	188
22	Reversible loss of core-shell structure for Ni-Au bimetallic nanoparticles during CO ₂ hydrogenation. Nature Catalysis, 2020, 3, 411-417.	16.1	186
23	On the Relation between Particle Morphology, Structure of the Metal-Support Interface, and Catalytic Properties of Pt/I ³ -Al ₂ O ₃ . Journal of Catalysis, 1996, 163, 294-305.	3.1	176
24	In situ fabrication of porous-carbon-supported MnO ₂ nanorods at room temperature: application for rechargeable Li-O ₂ batteries. Energy and Environmental Science, 2013, 6, 519.	15.6	175
25	Continuous Electrical Conductivity Variation in M ₃ (Hexaiminotriphenylene) ₂ (M = Co, Ni, Cu) MOF Alloys. Journal of the American Chemical Society, 2020, 142, 12367-12373.	6.6	169
26	Selective propane dehydrogenation with single-site Co on SiO ₂ by a non-redox mechanism. Journal of Catalysis, 2015, 322, 24-37.	3.1	168
27	Zinc Promotion of Platinum for Catalytic Light Alkane Dehydrogenation: Insights into Geometric and Electronic Effects. ACS Catalysis, 2017, 7, 4173-4181.	5.5	168
28	Inverse spinel NiFeAlO ₄ as a highly active oxygen evolution electrocatalyst: promotion of activity by a redox-inert metal ion. Energy and Environmental Science, 2014, 7, 1382.	15.6	167
29	Graphite-Conjugated Rhenium Catalysts for Carbon Dioxide Reduction. Journal of the American Chemical Society, 2016, 138, 1820-1823.	6.6	167
30	A fundamental study of platinum tetraammine impregnation of silica. The effect of method of preparation, loading, and calcination temperature on (reduced) particle size. Journal of Catalysis, 2004, 225, 203-212.	3.1	156
31	NO oxidation: A probe reaction on Cu-SSZ-13. Journal of Catalysis, 2014, 312, 179-190.	3.1	155
32	Differences in the Nature of Active Sites for Methane Dry Reforming and Methane Steam Reforming over Nickel Aluminate Catalysts. ACS Catalysis, 2016, 6, 5873-5886.	5.5	151
33	Single-Atom Alloy Pd-Ag Catalyst for Selective Hydrogenation of Acrolein. Journal of Physical Chemistry C, 2015, 119, 18140-18148.	1.5	150
34	Isolated Fe ^{II} on Silica As a Selective Propane Dehydrogenation Catalyst. ACS Catalysis, 2015, 5, 3494-3503.	5.5	144
35	A Hafnium-Based Metal-Organic Framework as a Nature-Inspired Tandem Reaction Catalyst. Journal of the American Chemical Society, 2015, 137, 13624-13631.	6.6	137
36	Direct Observation of Reduction of Cu(II) to Cu(I) by Terminal Alkynes. Journal of the American Chemical Society, 2014, 136, 924-926.	6.6	136

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37	In Situ Formed Pt ₃ Ti Nanoparticles on a Two-Dimensional Transition Metal Carbide (MXene) Used as Efficient Catalysts for Hydrogen Evolution Reactions. Nano Letters, 2019, 19, 5102-5108.	4.5	133
38	Cleaner water using bimetallic nanoparticle catalysts. Journal of Chemical Technology and Biotechnology, 2009, 84, 158-166.	1.6	127
39	Gas-Phase Dimerization of Ethylene under Mild Conditions Catalyzed by MOF Materials Containing (bpy)Ni ^{II} Complexes. ACS Catalysis, 2015, 5, 6713-6718.	5.5	127
40	Genesis and Evolution of Surface Species during Pt Atomic Layer Deposition on Oxide Supports Characterized by in Situ XAFS Analysis and Water ² Gas Shift Reaction. Journal of Physical Chemistry C, 2010, 114, 9758-9771.	1.5	124
41	Carbon Nitride-Based Ruthenium Single Atom Photocatalyst for CO ₂ Reduction to Methanol. Small, 2021, 17, e2006478.	5.2	124
42	Changes in Catalytic and Adsorptive Properties of 2 nm Pt ₃ Mn Nanoparticles by Subsurface Atoms. Journal of the American Chemical Society, 2018, 140, 14870-14877.	6.6	121
43	Pd ^{In} intermetallic alloy nanoparticles: highly selective ethane dehydrogenation catalysts. Catalysis Science and Technology, 2016, 6, 6965-6976.	2.1	119
44	Structure and reactivity of Pt ^{In} intermetallic alloy nanoparticles: Highly selective catalysts for ethane dehydrogenation. Catalysis Today, 2018, 299, 146-153.	2.2	119
45	Low absorption vitreous carbon reactors for operandoXAS: a case study on Cu/Zeolites for selective catalytic reduction of NO _x by NH ₃ . Physical Chemistry Chemical Physics, 2012, 14, 2229-2238.	1.3	116
46	Propane Dehydrogenation on Single-Site [PtZn ₄] Intermetallic Catalysts. Chem, 2021, 7, 387-405.	5.8	116
47	Strong Electronic Coupling of Molecular Sites to Graphitic Electrodes via Pyrazine Conjugation. Journal of the American Chemical Society, 2018, 140, 1004-1010.	6.6	111
48	Identification of a Pt ₃ Co Surface Intermetallic Alloy in Pt ^{Co} Propane Dehydrogenation Catalysts. ACS Catalysis, 2019, 9, 5231-5244.	5.5	111
49	Mechanistic Study of CO ₂ Photoreduction with H ₂ O on Cu/TiO ₂ Nanocomposites by in Situ X-ray Absorption and Infrared Spectroscopies. Journal of Physical Chemistry C, 2017, 121, 490-499.	1.5	107
50	Synthesis of Pt ^{Pd} Core ^{Shell} Nanostructures by Atomic Layer Deposition: Application in Propane Oxidative Dehydrogenation to Propylene. Chemistry of Materials, 2012, 24, 3525-3533.	3.2	104
51	Plasmonic Ag@Ag ₃ (PO ₄) _{1-x} nanoparticle photosensitized ZnO nanorod-array photoanodes for water oxidation. Energy and Environmental Science, 2012, 5, 8917.	15.6	103
52	Methods for NH ₃ titration of Brønsted acid sites in Cu-zeolites that catalyze the selective catalytic reduction of NO _x with NH ₃ . Journal of Catalysis, 2014, 312, 26-36.	3.1	103
53	Single-Site Organozirconium Catalyst Embedded in a Metal ^{Organic} Framework. Journal of the American Chemical Society, 2015, 137, 15680-15683.	6.6	103
54	Effect of Particle Size and Adsorbates on the L ₃ , L ₂ and L ₁ X-ray Absorption Near Edge Structure of Supported Pt Nanoparticles. Topics in Catalysis, 2011, 54, 334-348.	1.3	101

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55	High-Capacitance Pseudocapacitors from Li ⁺ Ion Intercalation in Nonporous, Electrically Conductive 2D Coordination Polymers. <i>Journal of the American Chemical Society</i> , 2021, 143, 2285-2292.	6.6	99
56	A comparison of N-containing carbon nanostructures (CN) and N-coordinated iron-carbon catalysts (FeNC) for the oxygen reduction reaction in acidic media. <i>Journal of Catalysis</i> , 2014, 317, 30-43.	3.1	98
57	Metallic Pt as active sites for the water-gas shift reaction on alkali-promoted supported catalysts. <i>Journal of Catalysis</i> , 2012, 286, 279-286.	3.1	97
58	NO Disproportionation at a Mononuclear Site-Isolated Fe ²⁺ Center in Fe ²⁺ -MOF-5. <i>Journal of the American Chemical Society</i> , 2015, 137, 7495-7501.	6.6	96
59	Enhancement of <i>m</i> -Cresol Hydrodeoxygenation Selectivity on Ni Catalysts by Surface Decoration of MoO _x Species. <i>ACS Catalysis</i> , 2019, 9, 7791-7800.	5.5	95
60	A multicentre-bonded [Zn] ₈ cluster with cubic aromaticity. <i>Nature Communications</i> , 2015, 6, 6331.	5.8	94
61	The Dynamic Nature of Brønsted Acid Sites in Cu-Zeolites During NO _x Selective Catalytic Reduction: Quantification by Gas-Phase Ammonia Titration. <i>Topics in Catalysis</i> , 2015, 58, 424-434.	1.3	91
62	A Structural Mimic of Carbonic Anhydrase in a Metal-Organic Framework. <i>CheM</i> , 2018, 4, 2894-2901.	5.8	91
63	Organometallic model complexes elucidate the active gallium species in alkane dehydrogenation catalysts based on ligand effects in Ga K-edge XANES. <i>Catalysis Science and Technology</i> , 2016, 6, 6339-6353.	2.1	90
64	A molecular cross-linking approach for hybrid metal oxides. <i>Nature Materials</i> , 2018, 17, 341-348.	13.3	90
65	Ethanol Conversion to Butadiene over Isolated Zinc and Yttrium Sites Grafted onto Dealuminated Beta Zeolite. <i>Journal of the American Chemical Society</i> , 2020, 142, 14674-14687.	6.6	90
66	Surface structural-chemical characterization of a single-site d ⁰ heterogeneous arene hydrogenation catalyst having 100% active sites. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 413-418.	3.3	87
67	Reverse Water-Gas Shift on Interfacial Sites Formed by Deposition of Oxidized Molybdenum Moieties onto Gold Nanoparticles. <i>Journal of the American Chemical Society</i> , 2015, 137, 10317-10325.	6.6	87
68	Engineering catalyst supports to stabilize PdO _x two-dimensional rafts for water-tolerant methane oxidation. <i>Nature Catalysis</i> , 2021, 4, 830-839.	16.1	86
69	Reduction Characteristics of Ceria under Ethanol Steam Reforming Conditions: Effect of the Particle Size. <i>ACS Catalysis</i> , 2014, 4, 585-592.	5.5	83
70	Dominant Role of Entropy in Stabilizing Sugar Isomerization Transition States within Hydrophobic Zeolite Pores. <i>Journal of the American Chemical Society</i> , 2018, 140, 14244-14266.	6.6	83
71	Use of H ₂ S to Probe the Active Sites in FeNC Catalysts for the Oxygen Reduction Reaction (ORR) in Acidic Media. <i>ACS Catalysis</i> , 2014, 4, 3454-3462.	5.5	81
72	Modifying structure-sensitive reactions by addition of Zn to Pd. <i>Journal of Catalysis</i> , 2014, 318, 75-84.	3.1	80

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73	An introduction to X-ray absorption spectroscopy and its in situ application to organometallic compounds and homogeneous catalysts. <i>Catalysis Science and Technology</i> , 2012, 2, 461-470.	2.1	79
74	Labile Cu(I) Catalyst/Spectator Cu(II) Species in Copper-Catalyzed C-C Coupling Reaction: Operando IR, in Situ XANES/EXAFS Evidence and Kinetic Investigations. <i>Journal of the American Chemical Society</i> , 2013, 135, 488-493.	6.6	78
75	Bond breakage under pressure in a metal organic framework. <i>Chemical Science</i> , 2017, 8, 8004-8011.	3.7	77
76	Benzene Selectivity in Competitive Arene Hydrogenation: Effects of Single-Site Catalyst's Acidic Oxide Surface Binding Geometry. <i>Journal of the American Chemical Society</i> , 2015, 137, 6770-6780.	6.6	76
77	Single-site zinc on silica catalysts for propylene hydrogenation and propane dehydrogenation: Synthesis and reactivity evaluation using an integrated atomic layer deposition-catalysis instrument. <i>Journal of Catalysis</i> , 2017, 345, 170-182.	3.1	76
78	Determination of CO, H ₂ O and H ₂ coverage by XANES and EXAFS on Pt and Au during water gas shift reaction. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 5678.	1.3	75
79	Stabilized Vanadium Catalyst for Olefin Polymerization by Site Isolation in a Metal-Organic Framework. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 8135-8139.	7.2	73
80	Interface-mediated noble metal deposition on transition metal dichalcogenide nanostructures. <i>Nature Chemistry</i> , 2020, 12, 284-293.	6.6	73
81	Designing Highly Efficient and Long-Term Durable Electrocatalyst for Oxygen Evolution by Coupling B and P into Amorphous Porous NiFe-Based Material. <i>Small</i> , 2019, 15, e1901020.	5.2	71
82	Lewis acid enhancement by juxtaposition with an onium ion: the case of a mercury stibonium complex. <i>Chemical Science</i> , 2012, 3, 1128.	3.7	69
83	Adsorbate-Induced Structural Changes in 1-3 nm Platinum Nanoparticles. <i>Journal of the American Chemical Society</i> , 2014, 136, 9320-9326.	6.6	69
84	Water-gas shift catalysis over transition metals supported on molybdenum carbide. <i>Journal of Catalysis</i> , 2015, 331, 162-171.	3.1	68
85	Structural evolution of an intermetallic Pd-Zn catalyst selective for propane dehydrogenation. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 28144-28153.	1.3	67
86	Selective hydrogenation of acrolein on supported silver catalysts: A kinetics study of particle size effects. <i>Journal of Catalysis</i> , 2013, 298, 18-26.	3.1	66
87	Compression-Induced Deformation of Individual Metal-Organic Framework Microcrystals. <i>Journal of the American Chemical Society</i> , 2015, 137, 1750-1753.	6.6	66
88	Single-Site Palladium(II) Catalyst for Oxidative Heck Reaction: Catalytic Performance and Kinetic Investigations. <i>ACS Catalysis</i> , 2015, 5, 3752-3759.	5.5	66
89	Evidence for the Coordination-Insertion Mechanism of Ethene Dimerization at Nickel Cations Exchanged onto Beta Molecular Sieves. <i>ACS Catalysis</i> , 2018, 8, 11407-11422.	5.5	66
90	Operando X-ray absorption and EPR evidence for a single electron redox process in copper catalysis. <i>Chemical Science</i> , 2015, 6, 4851-4854.	3.7	65

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91	Volcano-shape glycerol oxidation activity of palladium-decorated gold nanoparticles. <i>Chemical Science</i> , 2014, 5, 3715-3728.	3.7	64
92	Highly Stereoselective Heterogeneous Diene Polymerization by Co-MFU-4l: A Single-Site Catalyst Prepared by Cation Exchange. <i>Journal of the American Chemical Society</i> , 2017, 139, 12664-12669.	6.6	63
93	Direct methane activation by atomically thin platinum nanolayers on two-dimensional metal carbides. <i>Nature Catalysis</i> , 2021, 4, 882-891.	16.1	63
94	Aqueous Phase Glycerol Reforming by PtMo Bimetallic Nano-Particle Catalyst: Product Selectivity and Structural Characterization. <i>Topics in Catalysis</i> , 2012, 55, 53-69.	1.3	62
95	Highly Selective Heterogeneous Ethylene Dimerization with a Scalable and Chemically Robust MOF Catalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 6654-6661.	3.2	62
96	Establishing Relationships Between the Geometric Structure and Chemical Reactivity of Alloy Catalysts Based on Their Measured Electronic Structure. <i>Topics in Catalysis</i> , 2010, 53, 348-356.	1.3	60
97	Hydrodechlorination catalysis of Pd-on-Au nanoparticles varies with particle size. <i>Journal of Catalysis</i> , 2013, 298, 206-217.	3.1	60
98	Structural analysis of palladium-decorated gold nanoparticles as colloidal bimetallic catalysts. <i>Catalysis Today</i> , 2011, 160, 96-102.	2.2	57
99	Selective Dimerization of Propylene with Ni-MFU-4l. <i>Organometallics</i> , 2017, 36, 1681-1683.	1.1	55
100	Synthesis and characterization of uniformly dispersed Fe ₃ O ₄ /Fe nanocomposite on porous carbon: application for rechargeable Li-O ₂ batteries. <i>RSC Advances</i> , 2013, 3, 8276.	1.7	54
101	The Nature of the Isolated Gallium Active Center for Propane Dehydrogenation on Ga/SiO ₂ . <i>Catalysis Letters</i> , 2017, 147, 1252-1262.	1.4	54
102	Structural and kinetic changes to small-pore Cu-zeolites after hydrothermal aging treatments and selective catalytic reduction of NO _x with ammonia. <i>Reaction Chemistry and Engineering</i> , 2017, 2, 168-179.	1.9	54
103	Copper-/Cobalt-Catalyzed Highly Selective Radical Dioxygenation of Alkenes. <i>Organic Letters</i> , 2015, 17, 3402-3405.	2.4	50
104	Intermetallic Compounds as an Alternative to Single-Atom Alloy Catalysts: Geometric and Electronic Structures from Advanced X-ray Spectroscopies and Computational Studies. <i>ChemCatChem</i> , 2020, 12, 1325-1333.	1.8	50
105	A high-performance hydroxide exchange membrane enabled by Cu ²⁺ -crosslinked chitosan. <i>Nature Nanotechnology</i> , 2022, 17, 629-636.	15.6	50
106	Surface Hexagonal Pt ₁ Sn ₁ Intermetallic on Pt Nanoparticles for Selective Propane Dehydrogenation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 25903-25909.	4.0	49
107	Spectroscopic and kinetic responses of Cu-SSZ-13 to SO ₂ exposure and implications for NO _x selective catalytic reduction. <i>Applied Catalysis A: General</i> , 2019, 574, 122-131.	2.2	48
108	Speciation and kinetic study of iron promoted sugar conversion to 5-hydroxymethylfurfural (HMF) and levulinic acid (LA). <i>Organic Chemistry Frontiers</i> , 2015, 2, 1388-1396.	2.3	46

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109	Effect of Cobalt on Reduction Characteristics of Ceria under Ethanol Steam Reforming Conditions: AP-XPS and XANES Studies. <i>Journal of Physical Chemistry C</i> , 2016, 120, 14631-14642.	1.5	46
110	Valorization of Shale Gas Condensate to Liquid Hydrocarbons through Catalytic Dehydrogenation and Oligomerization. <i>Processes</i> , 2018, 6, 139.	1.3	46
111	Molybdenum Oxide, Oxycarbide, and Carbide: Controlling the Dynamic Composition, Size, and Catalytic Activity of Zeolite-Supported Nanostructures. <i>Journal of Physical Chemistry C</i> , 2019, 123, 22281-22292.	1.5	46
112	Identification of Surface Structures in Pt ₃ Cr Intermetallic Nanocatalysts. <i>Chemistry of Materials</i> , 2019, 31, 1597-1609.	3.2	46
113	Effects of dioxygen pressure on rates of NO _x selective catalytic reduction with NH ₃ on Cu-CHA zeolites. <i>Journal of Catalysis</i> , 2020, 389, 140-149.	3.1	44
114	Selective Adsorption of Manganese onto Rhodium for Optimized Mn/Rh/SiO ₂ Alcohol Synthesis Catalysts. <i>ChemCatChem</i> , 2013, 5, 3665-3672.	1.8	42
115	In situ diffraction of highly dispersed supported platinum nanoparticles. <i>Catalysis Science and Technology</i> , 2014, 4, 3053-3063.	2.1	42
116	Promotion of Pd nanoparticles by Fe and formation of a Pd ₃ Fe intermetallic alloy for propane dehydrogenation. <i>Catalysis Today</i> , 2019, 323, 123-128.	2.2	42
117	Structural Interconversion between Agglomerated Palladium Domains and Mononuclear Pd(II) Cations in Chabazite Zeolites. <i>Chemistry of Materials</i> , 2021, 33, 1698-1713.	3.2	42
118	Origin of Electronic Modification of Platinum in a Pt ₃ V Alloy and Its Consequences for Propane Dehydrogenation Catalysis. <i>ACS Applied Energy Materials</i> , 2020, 3, 1410-1422.	2.5	41
119	Evolution of N-Coordinated Iron-Carbon (FeNC) Catalysts and Their Oxygen Reduction (ORR) Performance in Acidic Media at Various Stages of Catalyst Synthesis: An Attempt at Benchmarking. <i>Catalysis Letters</i> , 2016, 146, 1749-1770.	1.4	40
120	Single Co-Atoms as Electrocatalysts for Efficient Hydrazine Oxidation Reaction. <i>Small</i> , 2021, 17, e2006477.	5.2	40
121	Effect of Siloxane Ring Strain and Cation Charge Density on the Formation of Coordinately Unsaturated Metal Sites on Silica: Insights from Density Functional Theory (DFT) Studies. <i>ACS Catalysis</i> , 2015, 5, 7177-7185.	5.5	38
122	Conversion of Dimethyl Ether to 2,2,3-Trimethylbutane over a Cu/BEA Catalyst: Role of Cu Sites in Hydrogen Incorporation. <i>ACS Catalysis</i> , 2015, 5, 1794-1803.	5.5	37
123	Deconvolution of octahedral Pt ₃ Ni nanoparticle growth pathway from in situ characterizations. <i>Nature Communications</i> , 2018, 9, 4485.	5.8	37
124	Onset of High Methane Combustion Rates over Supported Palladium Catalysts: From Isolated Pd Cations to PdO Nanoparticles. <i>Jacs Au</i> , 2021, 1, 396-408.	3.6	37
125	Colloidal Synthesis of Well-Defined Bimetallic Nanoparticles for Nonoxidative Alkane Dehydrogenation. <i>ACS Catalysis</i> , 2020, 10, 9813-9823.	5.5	36
126	Reactivity of (bi-Oxazoline)organonickel Complexes and Revision of a Catalytic Mechanism. <i>Journal of the American Chemical Society</i> , 2021, 143, 14458-14463.	6.6	34

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127	Effect of Cu content on the bimetallic Pt-Cu catalysts for propane dehydrogenation. Journal of Lithic Studies, 2017, 3, 43-53.	0.1	33
128	Composition Tuning of Ru-Based Phosphide for Enhanced Propane Selective Dehydrogenation. ACS Catalysis, 2020, 10, 10243-10252.	5.5	33
129	Aqueous Phase Glycerol Reforming with Pt and PtMo Bimetallic Nanoparticle Catalysts: The Role of the Mo Promoter. Topics in Catalysis, 2013, 56, 1814-1828.	1.3	32
130	Concerted Growth and Ordering of Cobalt Nanorod Arrays as Revealed by Tandem in Situ SAXS-XAS Studies. Journal of the American Chemical Society, 2016, 138, 8422-8431.	6.6	32
131	Elucidating the Structure of Bimetallic NiW/SiO ₂ Catalysts and Its Consequences on Selective Deoxygenation of <i>m</i> -Cresol to Toluene. ACS Catalysis, 2021, 11, 2935-2948.	5.5	32
132	Tetrahedral Nickel(II) Phosphosilicate Single-Site Selective Propane Dehydrogenation Catalyst. ChemCatChem, 2018, 10, 961-964.	1.8	31
133	Identification of the structure of the Bi promoted Pt non-oxidative coupling of methane catalyst: a nanoscale Pt ₃ Bi intermetallic alloy. Catalysis Science and Technology, 2019, 9, 1349-1356.	2.1	31
134	Operando Spectroscopic and Kinetic Characterization of Aerobic Allylic C-H Acetoxylation Catalyzed by Pd(OAc) ₂ /4,5-Diazafluoren-9-one. Journal of the American Chemical Society, 2019, 141, 10462-10474.	6.6	31
135	Speciation of CuCl and CuCl ₂ Thiol-Amine Solutions and Characterization of Resulting Films: Implications for Semiconductor Device Fabrication. Inorganic Chemistry, 2017, 56, 14396-14407.	1.9	30
136	Revealing the Thermal Safety of Prussian Blue Cathode for Safer Nonaqueous Batteries. Advanced Energy Materials, 2021, 11, 2101764.	10.2	29
137	Investigating Chemistry of Metal Dissolution in Amine-Thiol Mixtures and Exploiting It toward Benign Ink Formulation for Metal Chalcogenide Thin Films. Chemistry of Materials, 2019, 31, 5674-5682.	3.2	28
138	Strong metal-support interaction (SMSI) of Pt/CeO ₂ and its effect on propane dehydrogenation. Catalysis Today, 2021, 371, 4-10.	2.2	28
139	In situ intermediate-energy X-ray catalysis research at the advanced photon source beamline 9-BM. Catalysis Today, 2013, 205, 141-147.	2.2	27
140	Synthesis and Catalytic Hydrogenation Reactivity of a Chromium Catecholate Porous Organic Polymer. Organometallics, 2015, 34, 947-952.	1.1	27
141	Air- and Water-Resistant Noble Metal Coated Ferromagnetic Cobalt Nanorods. ACS Nano, 2015, 9, 2792-2804.	7.3	27
142	Supported Tetrahedral Oxo-Sn Catalyst: Single Site, Two Modes of Catalysis. Journal of the American Chemical Society, 2016, 138, 4294-4297.	6.6	26
143	Structure Determination of a Surface Tetragonal Pt ₁ Sb ₁ Phase on Pt Nanoparticles. Chemistry of Materials, 2018, 30, 4503-4507.	3.2	26
144	Olefin oligomerization by main group Ga ³⁺ and Zn ²⁺ single site catalysts on SiO ₂ . Nature Communications, 2021, 12, 2322.	5.8	26

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145	Simultaneous Measurement of X-ray Absorption Spectra and Kinetics: A Fixed-bed, Plug-flow Operando Reactor. <i>Catalysis Letters</i> , 2009, 131, 1-6.	1.4	25
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