

Justin M Notestein

List of Publications by Year in descending order

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109
papers

3,579
citations

159358

30
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161609

54
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116
all docs

116
docs citations

116
times ranked

4090
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhancing Heterogeneous Catalysis through Cooperative Hybrid Organic–Inorganic Interfaces. <i>Chemistry - A European Journal</i> , 2006, 12, 3954-3965.	1.7	231
2	Machine learning the quantum-chemical properties of metal–organic frameworks for accelerated materials discovery. <i>Matter</i> , 2021, 4, 1578-1597.	5.0	170
3	Tandem In O_3 -Pt/Al O_3 catalyst for coupling of propane dehydrogenation to selective H $_2$ combustion. <i>Science</i> , 2021, 371, 1257-1260.	6.0	148
4	MOF-enabled confinement and related effects for chemical catalyst presentation and utilization. <i>Chemical Society Reviews</i> , 2022, 51, 1045-1097.	18.7	148
5	Periodic Trends in Highly Dispersed Groups IV and V Supported Metal Oxide Catalysts for Alkene Epoxidation with H $_2$ O $_2$. <i>ACS Catalysis</i> , 2015, 5, 5077-5088.	5.5	115
6	Consequences of Confinement for Alkene Epoxidation with Hydrogen Peroxide on Highly Dispersed Group 4 and 5 Metal Oxide Catalysts. <i>ACS Catalysis</i> , 2018, 8, 2995-3010.	5.5	111
7	Shape-selective sieving layers on an oxide catalyst surface. <i>Nature Chemistry</i> , 2012, 4, 1030-1036.	6.6	110
8	Structure–Activity Relationships That Identify Metal–Organic Framework Catalysts for Methane Activation. <i>ACS Catalysis</i> , 2019, 9, 3576-3587.	5.5	105
9	Grafted Metallocalixarenes as Single-Site Surface Organometallic Catalysts. <i>Journal of the American Chemical Society</i> , 2004, 126, 16478-16486.	6.6	95
10	Identifying promising metal–organic frameworks for heterogeneous catalysis via high-throughput periodic density functional theory. <i>Journal of Computational Chemistry</i> , 2019, 40, 1305-1318.	1.5	87
11	Stable Metal–Organic Framework-Supported Niobium Catalysts. <i>Inorganic Chemistry</i> , 2016, 55, 11954-11961.	1.9	85
12	Synthesis–Structure–Function Relationships of Silica-Supported Niobium(V) Catalysts for Alkene Epoxidation with H $_2$ O $_2$. <i>ACS Catalysis</i> , 2016, 6, 6124-6134.	5.5	78
13	The First Single-Step Immobilization of a Calix-[4]-arene onto the Surface of Silica. <i>Chemistry of Materials</i> , 2002, 14, 3364-3368.	3.2	76
14	Pushing the Limits on Metal–Organic Frameworks as a Catalyst Support: NU-1000 Supported Tungsten Catalysts for <i>o</i> -Xylene Isomerization and Disproportionation. <i>Journal of the American Chemical Society</i> , 2018, 140, 8535-8543.	6.6	73
15	Tuning the Redox Activity of Metal–Organic Frameworks for Enhanced, Selective O $_2$ Binding: Design Rules and Ambient Temperature O $_2$ Chemisorption in a Cobalt–Triazolate Framework. <i>Journal of the American Chemical Society</i> , 2020, 142, 4317-4328.	6.6	67
16	Photoluminescence and Charge-Transfer Complexes of Calixarenes Grafted on TiO $_2$ Nanoparticles. <i>Chemistry of Materials</i> , 2007, 19, 4998-5005.	3.2	65
17	Structural Assessment and Catalytic Consequences of the Oxygen Coordination Environment in Grafted Ti–Calixarenes. <i>Journal of the American Chemical Society</i> , 2007, 129, 1122-1131.	6.6	65
18	The Role of Outer-Sphere Surface Acidity in Alkene Epoxidation Catalyzed by Calixarene–Ti(IV) Complexes. <i>Journal of the American Chemical Society</i> , 2007, 129, 15585-15595.	6.6	61

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19	Computational Predictions and Experimental Validation of Alkane Oxidative Dehydrogenation by Fe ₂ M MOF Nodes. ACS Catalysis, 2020, 10, 1460-1469.	5.5	53
20	The Role of Amine Surface Density in Carbon Dioxide Adsorption on Functionalized Mixed Oxide Surfaces. ChemSusChem, 2011, 4, 1671-1678.	3.6	51
21	Depositing SiO ₂ on Al ₂ O ₃ : a Route to Tunable Brønsted Acid Catalysts. ACS Catalysis, 2016, 6, 6156-6164.	5.5	50
22	Adsorption of <i>n</i> -Butanol from Dilute Aqueous Solution with Grafted Calixarenes. Langmuir, 2011, 27, 11990-11998.	1.6	46
23	Grafted Ta-calixarenes: Tunable, selective catalysts for direct olefin epoxidation with aqueous hydrogen peroxide. Journal of Catalysis, 2010, 275, 191-201.	3.1	44
24	Manganese Triazacyclononane Oxidation Catalysts Grafted under Reaction Conditions on Solid Cocatalytic Supports. Journal of the American Chemical Society, 2011, 133, 18684-18695.	6.6	44
25	High-throughput predictions of metal-organic framework electronic properties: theoretical challenges, graph neural networks, and data exploration. Npj Computational Materials, 2022, 8, .	3.5	43
26	Silica support modifications to enhance Pd-catalyzed deoxygenation of stearic acid. Applied Catalysis B: Environmental, 2016, 192, 93-100.	10.8	40
27	Well-Defined Diblock Copolymers via Termination of Living ROMP with Anionically Polymerized Macromolecular Aldehydes. Macromolecules, 2002, 35, 1985-1987.	2.2	36
28	Understanding the Hydrodenitrogenation of Heteroaromatics on a Molecular Level. ACS Catalysis, 2016, 6, 1455-1476.	5.5	34
29	Energetics of Small Molecule and Water Complexation in Hydrophobic Calixarene Cavities. Langmuir, 2006, 22, 4004-4014.	1.6	32
30	Role of surface reconstruction on Cu/TiO ₂ nanotubes for CO ₂ conversion. Applied Catalysis B: Environmental, 2019, 255, 117754.	10.8	32
31	The Synthesis Science of Targeted Vapor-Phase Metal-Organic Framework Postmodification. Journal of the American Chemical Society, 2020, 142, 242-250.	6.6	32
32	Surface speciation and alkane oxidation with highly dispersed Fe(III) sites on silica. Journal of Catalysis, 2011, 279, 103-110.	3.1	31
33	Size-Selective Synthesis and Stabilization of Small Silver Nanoparticles on TiO ₂ Partially Masked by SiO ₂ . Chemistry of Materials, 2015, 27, 1269-1277.	3.2	31
34	Rate and Selectivity Control in Thioether and Alkene Oxidation with H ₂ O ₂ over Phosphonate-Modified Niobium(V)-Silica Catalysts. ChemCatChem, 2017, 9, 3714-3724.	1.8	31
35	Mechanism of Regioselective Ring-Opening Reactions of 1,2-Epoxyoctane Catalyzed by Tris(pentafluorophenyl)borane: A Combined Experimental, Density Functional Theory, and Microkinetic Study. ACS Catalysis, 2018, 8, 11119-11133.	5.5	31
36	The effect of support morphology on CoOX/CeO ₂ catalysts for the reduction of NO by CO. Journal of Catalysis, 2018, 366, 150-158.	3.1	31

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37	Quantifying accessible sites and reactivity on titania-silica (photo)catalysts: Refining TOF calculations. <i>Journal of Catalysis</i> , 2014, 309, 156-165.	3.1	30
38	Cyclohexane oxidative dehydrogenation over copper oxide catalysts. <i>Journal of Catalysis</i> , 2016, 341, 180-190.	3.1	30
39	A heterogeneous, selective oxidation catalyst based on Mn triazacyclononane grafted under reaction conditions. <i>Chemical Communications</i> , 2010, 46, 1640.	2.2	28
40	Realizing the data-driven, computational discovery of metal-organic framework catalysts. <i>Current Opinion in Chemical Engineering</i> , 2022, 35, 100760.	3.8	28
41	<i>In Situ</i> Characterization of Highly Dispersed, Ceria-Supported Fe Sites for NO Reduction by CO. <i>Journal of Physical Chemistry C</i> , 2015, 119, 4224-4234.	1.5	27
42	MOFs and their grafted analogues: regioselective epoxide ring-opening with Zr ₆ nodes. <i>Catalysis Science and Technology</i> , 2016, 6, 6480-6484.	2.1	27
43	Identifying Boron Active Sites for the Oxidative Dehydrogenation of Propane. <i>ACS Catalysis</i> , 2021, 11, 9370-9376.	5.5	27
44	Counting Active Sites on Titanium Oxide-Silica Catalysts for Hydrogen Peroxide Activation through <i>In Situ</i> Poisoning with Phenylphosphonic Acid. <i>ChemCatChem</i> , 2014, 6, 3215-3222.	1.8	26
45	Kinetic study of cyclooctene epoxidation with aqueous hydrogen peroxide over silica-supported calixarene-Ta(V). <i>Applied Catalysis A: General</i> , 2010, 387, 45-54.	2.2	25
46	Modulating Chemical Environments of Metal-Organic Framework-Supported Molybdenum(VI) Catalysts for Insights into the Structure-Activity Relationship in Cyclohexene Epoxidation. <i>Journal of the American Chemical Society</i> , 2022, 144, 3554-3563.	6.6	25
47	Role of Support Lewis Acid Strength in Copper-Oxide-Catalyzed Oxidative Dehydrogenation of Cyclohexane. <i>ACS Catalysis</i> , 2018, 8, 7598-7607.	5.5	24
48	Zr ₆ O ₈ Node-Catalyzed Butene Hydrogenation and Isomerization in the Metal-Organic Framework NU-1000. <i>ACS Catalysis</i> , 2020, 10, 14959-14970.	5.5	24
49	Supramolecular Porous Assemblies of Atomically Precise Catalytically Active Cerium-Based Clusters. <i>Chemistry of Materials</i> , 2020, 32, 8522-8529.	3.2	23
50	Catalyst structure and substituent effects on epoxidation of styrenics with immobilized Mn(tmtacn) complexes. <i>Applied Catalysis A: General</i> , 2016, 511, 78-86.	2.2	22
51	Multifunctional photo/thermal catalysts for the reduction of carbon dioxide. <i>Catalysis Today</i> , 2017, 280, 65-73.	2.2	22
52	Catalytic reduction of NO with H ₂ over redox-cycling Fe on CeO ₂ . <i>Applied Catalysis B: Environmental</i> , 2015, 168-169, 68-76.	10.8	21
53	Fast Cyclohexane Oxidation Under Mild Reaction Conditions Through a Controlled Creation of Redox-Active Fe(II/III) Sites in a Metal-Organic Framework. <i>ChemCatChem</i> , 2019, 11, 5650-5656.	1.8	21
54	Heterometallic Ce ^{IV} /V ^V Oxo Clusters with Adjustable Catalytic Reactivities. <i>Journal of the American Chemical Society</i> , 2021, 143, 21056-21065.	6.6	21

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55	Strong electrostatic adsorption of Pt onto SiO ₂ partially overcoated Al ₂ O ₃ Towards single atom catalysts. <i>Journal of Chemical Physics</i> , 2019, 151, 214703.	1.2	20
56	Structural and electronic promotion with alkali cations of silica-supported Fe(III) sites for alkane oxidation. <i>Journal of Catalysis</i> , 2012, 296, 77-85.	3.1	19
57	Predicting NO _x Catalysis by Quantifying Ce ³⁺ from Surface and Lattice Oxygen. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 30670-30678.	4.0	19
58	Enhancing the Regioselectivity of B(C ₆ F ₅) ₃ -Catalyzed Epoxide Alcoholysis Reactions Using Hydrogen-Bond Acceptors. <i>ACS Catalysis</i> , 2019, 9, 9663-9670.	5.5	19
59	Solid Cocatalysts for Activating Manganese Triazacyclononane Oxidation Catalysts. <i>ACS Catalysis</i> , 2011, 1, 1691-1701.	5.5	18
60	Synthesis and stabilization of small Pt nanoparticles on TiO ₂ partially masked by SiO ₂ . <i>Applied Catalysis A: General</i> , 2018, 551, 122-128.	2.2	18
61	Comprehensive Phase Diagrams of MoS ₂ Edge Sites Using Dispersion-Corrected DFT Free Energy Calculations. <i>Journal of Physical Chemistry C</i> , 2018, 122, 15318-15329.	1.5	18
62	Isobutane Dehydrogenation over Bulk and Supported Molybdenum Sulfide Catalysts. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 1113-1122.	1.8	18
63	Cyclohexene epoxidation with H ₂ O ₂ in the vapor and liquid phases over a vanadium-based metal-organic framework. <i>Catalysis Science and Technology</i> , 2020, 10, 4580-4585.	2.1	18
64	Vapor-phase ethanol carbonylation with heteropolyacid-supported Rh. <i>Journal of Catalysis</i> , 2015, 325, 1-8.	3.1	17
65	Vapor-Phase Cyclohexene Epoxidation by Single-Ion Fe(III) Sites in Metal-Organic Frameworks. <i>Inorganic Chemistry</i> , 2021, 60, 2457-2463.	1.9	17
66	Acceptorless Dehydrogenative Coupling of Neat Alcohols Using Group VI Sulfide Catalysts. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 4890-4896.	3.2	16
67	Ni(II) complex on a bispyridine-based porous organic polymer as a heterogeneous catalyst for ethylene oligomerization. <i>Catalysis Science and Technology</i> , 2017, 7, 4351-4354.	2.1	16
68	In-situ IR spectroscopy as a probe of oxidation/reduction of Ce in nanostructured CeO ₂ . <i>Applied Surface Science</i> , 2018, 445, 548-554.	3.1	16
69	Comparing GGA, GGA+U, and meta-GGA functionals for redox-dependent binding at open metal sites in metal-organic frameworks. <i>Journal of Chemical Physics</i> , 2020, 152, 224101.	1.2	16
70	Demonstrating the Critical Role of Solvation in Supported Ti and Nb Epoxidation Catalysts via Vapor-Phase Kinetics. <i>ACS Catalysis</i> , 2020, 10, 2817-2825.	5.5	16
71	Recovery of Dilute Aqueous Acetone, Butanol, and Ethanol with Immobilized Calixarene Cavities. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 289-297.	4.0	15
72	Strong Influence of the Nucleophile on the Rate and Selectivity of 1,2-Epoxyoctane Ring Opening Catalyzed by Tris(pentafluorophenyl)borane, B(C ₆ F ₅) ₃ . <i>ACS Catalysis</i> , 2019, 9, 11589-11602.	5.5	14

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73	High-Valent Metal-Oxo Species at the Nodes of Metal-Triazolate Frameworks: The Effects of Ligand Exchange and Two-State Reactivity for C-H Bond Activation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19494-19502.	7.2	14
74	Increased productivity in ethylene carbonylation by zeolite-supported molybdenum carbonyls. <i>Journal of Catalysis</i> , 2016, 338, 313-320.	3.1	13
75	Identifying properties of low-loaded CoOx/CeO ₂ via X-ray absorption spectroscopy for NO reduction by CO. <i>Journal of Catalysis</i> , 2020, 381, 355-362.	3.1	13
76	Gas phase acceptorless dehydrogenative coupling of ethanol over bulk MoS ₂ and spectroscopic measurement of structural disorder. <i>Journal of Catalysis</i> , 2018, 366, 159-166.	3.1	12
77	Vapor phase ethanol carbonylation over Rh supported on zeolite 13X. <i>Applied Catalysis A: General</i> , 2016, 520, 122-131.	2.2	11
78	Evidence for Copper Dimers in Low-Loaded CuO/SiO ₂ Catalysts for Cyclohexane Oxidative Dehydrogenation. <i>ACS Catalysis</i> , 2018, 8, 9775-9789.	5.5	11
79	Catalytic dehydrogenation of isobutane over supported MoO _x /K-Al ₂ O ₃ . <i>Journal of Catalysis</i> , 2021, 397, 212-222.	3.1	11
80	Microkinetic modeling of cis-cyclooctene oxidation on heterogeneous Mn-tmtacn complexes. <i>Journal of Catalysis</i> , 2012, 291, 17-25.	3.1	10
81	In situ FTIR spectroscopy of highly dispersed FeOx catalysts for NO reduction: Role of Na promoter. <i>Catalysis Today</i> , 2016, 267, 56-64.	2.2	10
82	Hybrid Approach for Selective Sulfoxidation via Bioelectrochemically Derived Hydrogen Peroxide over a Niobium(V)-Silica Catalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 7880-7889.	3.2	10
83	Direct Visualization of Independent Ta Centers Supported on Two-Dimensional TiO ₂ Nanosheets. <i>Nano Letters</i> , 2019, 19, 8103-8108.	4.5	10
84	Controlled Deposition of Silica on Titania-Silica to Alter the Active Site Surroundings on Epoxidation Catalysts. <i>ACS Catalysis</i> , 2020, 10, 13008-13018.	5.5	10
85	Graftable chiral ligands for surface organometallic materials: calixarenes bearing asymmetric centers directly attached to the lower rim. <i>New Journal of Chemistry</i> , 2008, 32, 1314.	1.4	9
86	Increasing the Aromatic Selectivity of Quinoline Hydrogenolysis Using Pd/MOx-Al ₂ O ₃ . <i>Catalysis Letters</i> , 2014, 144, 1832-1838.	1.4	9
87	The role of iodide promoters and the mechanism of ethylene carbonylation catalyzed by molybdenum hexacarbonyl. <i>Journal of Catalysis</i> , 2014, 319, 211-219.	3.1	9
88	High-Valent Metal-Oxo Species at the Nodes of Metal-Triazolate Frameworks: The Effects of Ligand Exchange and Two-State Reactivity for C-H Bond Activation. <i>Angewandte Chemie</i> , 2020, 132, 19662-19670.	1.6	9
89	Creating Brønsted acidity at the SiO ₂ -Nb ₂ O ₅ interface. <i>Journal of Catalysis</i> , 2021, 394, 387-396.	3.1	8
90	Synthesis of a family of peracid-silica materials and their use as alkene epoxidation reagents. <i>Microporous and Mesoporous Materials</i> , 2016, 225, 289-295.	2.2	6

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91	Exploring mechanistic routes for light alkane oxidation with an iron-triazolate metal-organic framework. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 8129-8141.	1.3	6
92	Mechanistic Investigation of Enhanced Catalytic Selectivity toward Alcohol Oxidation with Ce Oxysulfate Clusters. <i>Journal of the American Chemical Society</i> , 2022, 144, 12092-12101.	6.6	6
93	C-N bond hydrogenolysis of aniline and cyclohexylamine over TaOx-Al ₂ O ₃ . <i>New Journal of Chemistry</i> , 2016, 40, 6001-6004.	1.4	5
94	Investigating the effect of metal nuclearity on activity for ethylene hydrogenation by metal-organic-framework-supported oxy-Ni(II) catalysts. <i>Journal of Catalysis</i> , 2022, 407, 162-173.	3.1	5
95	Identifying Support Effects in Au-Catalyzed CO Oxidation. <i>ACS Catalysis</i> , 2021, 11, 11921-11928.	5.5	4
96	Improving and stabilizing fluorinated aryl borane catalysts for epoxide ring-opening. <i>Applied Catalysis A: General</i> , 2022, 636, 118601.	2.2	4
97	A tri-layer approach to controlling nanopore formation in oxide supports. <i>Nano Research</i> , 2019, 12, 1223-1228.	5.8	3
98	Covalent Grafting of <i>m</i> -Phenylene-Ethynylene Oligomers to Oxide Surfaces. <i>Chemistry of Materials</i> , 2010, 22, 5319-5327.	3.2	2
99	Photo-initiated Reduction of CO ₂ by H ₂ on Silica Surface. <i>ChemSusChem</i> , 2018, 11, 1163-1168.	3.6	2
100	Submonolayer Is Enough: Switching Reaction Channels on Pt/SiO ₂ by Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2021, 125, 18725-18733.	1.5	2
101	Assessment of catalysts for oxidative coupling of methane and ethylene. <i>Catalysis Today</i> , 2023, 416, 113770.	2.2	2
102	Interfacial Unit-Dependent Catalytic Activity for CO Oxidation over Cerium Oxysulfate Cluster Assemblies. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 33515-33524.	4.0	2
103	A Unique Qualitative GC Experiment for an Undergraduate Instrumental Methods Course Using Selective Photoionization Detectors. <i>Journal of Chemical Education</i> , 1998, 75, 360.	1.1	1
104	Promoter Effects on Catalyst Selectivity and Stability for Propylene Partial Oxidation to Acrolein. <i>Catalysis Letters</i> , 2020, 150, 826-836.	1.4	1
105	Molybdenum oxide and sulfide active sites for isobutane dehydrogenation with methanol as a probe molecule. <i>Journal of Catalysis</i> , 2022, 413, 498-508.	3.1	1
106	R. Åebesta (ed.): Enantioselective Homogeneous Supported Catalysis. <i>Catalysis Letters</i> , 2012, 142, 1150-1151.	1.4	0
107	Photo-Initiated Reduction of CO ₂ by H ₂ on Silica Surface. <i>ChemSusChem</i> , 2018, 11, 1135-1135.	3.6	0
108	Mapping the thermal entrenchment behavior of Pd nanoparticles on planar SiO ₂ supports. <i>Nanoscale</i> , 2020, 12, 14245-14258.	2.8	0

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109	Orientation of 1,1'-Bi-2-naphthol Grafted onto TiO ₂ . Journal of Physical Chemistry C, 2022, 126, 7980-7990.	1.5	0