David J Willock

List of Publications by Year
in descending order

331 papers	29,804 citations	6613 79 h-index	5255 165 g-index
346 all docs	346 docs citations	346 times ranked	20804 citing authors

#	Article	IF	Citations
1	Gold Catalysis. Angewandte Chemie - International Edition, 2006, 45, 7896-7936.	13.8	3,254
2	Solvent-Free Oxidation of Primary Alcohols to Aldehydes Using Au-Pd/TiO2 Catalysts. Science, 2006, 311, 362-365.	12.6	1,976
3	Identification of Active Gold Nanoclusters on Iron Oxide Supports for CO Oxidation. Science, 2008, 321, 1331-1335.	12.6	1,448
4	Tunable gold catalysts for selective hydrocarbon oxidation under mild conditions. Nature, 2005, 437, 1132-1135.	27.8	955
5	Switching Off Hydrogen Peroxide Hydrogenation in the Direct Synthesis Process. Science, 2009, 323, 1037-1041.	12.6	759
6	Solvent-Free Oxidation of Primary Carbon-Hydrogen Bonds in Toluene Using Au-Pd Alloy Nanoparticles. Science, 2011, 331, 195-199.	12.6	708
7	Facile removal of stabilizer-ligands from supported gold nanoparticles. Nature Chemistry, 2011, 3, 551-556.	13.6	517
8	Selective oxidation of glycerol to glyceric acid using a gold catalyst in aqueous sodium hydroxide. Chemical Communications, 2002, , 696-697.	4.1	498
9	Direct Catalytic Conversion of Methane to Methanol in an Aqueous Medium by using Copperâ€Promoted Feâ€ZSMâ€5. Angewandte Chemie - International Edition, 2012, 51, 5129-5133.	13.8	492
10	Aqueous Au-Pd colloids catalyze selective CH ₄ oxidation to CH ₃ OH with O ₂ under mild conditions. Science, 2017, 358, 223-227.	12.6	478
11	Direct formation of hydrogen peroxide from H2/O2 using a gold catalyst. Chemical Communications, 2002, , 2058-2059.	4.1	476
12	Goldâ€"an introductory perspective. Chemical Society Reviews, 2008, 37, 1759.	38.1	384
13	Identification of single-site gold catalysis in acetylene hydrochlorination. Science, 2017, 355, 1399-1403.	12.6	380
14	Direct synthesis of hydrogen peroxide from H2 and O2 using Pd and Au catalysts. Physical Chemistry Chemical Physics, 2003, 5, 1917-1923.	2.8	336
15	Role of gold cations in the oxidation of carbon monoxide catalyzed by iron oxide-supported gold. Journal of Catalysis, 2006, 242, 71-81.	6.2	322
16	Palladium and Goldâ€"Palladium Catalysts for the Direct Synthesis of Hydrogen Peroxide. Angewandte Chemie - International Edition, 2008, 47, 9192-9198.	13.8	316
17	De novo design of structure-directing agents for the synthesis of microporous solids. Nature, 1996, 382, 604-606.	27.8	302
18	Discovery, Development, and Commercialization of Gold Catalysts for Acetylene Hydrochlorination. Journal of the American Chemical Society, 2015, 137, 14548-14557.	13.7	283

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19	Role of Electrostatic Interactions in Determining the Crystal Structures of Polar Organic Molecules. A Distributed Multipole Study. The Journal of Physical Chemistry, 1996, 100, 7352-7360.	2.9	280
20	Role of the Support in Gold-Containing Nanoparticles as Heterogeneous Catalysts. Chemical Reviews, 2020, 120, 3890-3938.	47.7	275
21	Oxidation of Methane to Methanol with Hydrogen Peroxide Using Supported Goldâ€“Palladium Alloy Nanoparticles. Angewandte Chemie - International Edition, 2013, 52, 1280-1284.	13.8	239
22	Selective liquid phase oxidation with supported metal nanoparticles. Chemical Science, 2012, 3, 20-44.	7.4	224
23	Hydrochlorination of acetylene using a supported gold catalyst: A study of the reaction mechanism. Journal of Catalysis, 2007, 250, 231-239.	6.2	219
24	Selective Oxidation of Glycerol by Highly Active Bimetallic Catalysts at Ambient Temperature under Baseâ€Free Conditions. Angewandte Chemie - International Edition, 2011, 50, 10136-10139.	13.8	212
25	Direct Synthesis of H₂O₂ from H₂ and O₂ over Gold, Palladium, and Goldâ€“Palladium Catalysts Supported on Acidâ€Pretreated TiO₂. Angewandte Chemie - International Edition, 2009, 48, 8512-8515.	13.8	210
26	Promotion by sulfur of gold catalysts for crotyl alcohol formation from crotonaldehyde hydrogenation. Chemical Communications, 1999, , 2151-2152.	4.1	208
27	Direct synthesis of hydrogen peroxide from H₂and O₂using supported Auâ€“Pd catalysts. Faraday Discussions, 2008, 138, 225-239.	3.2	207
28	Direct Synthesis of Hydrogen Peroxide and Benzyl Alcohol Oxidation Using Auâˆ’Pd Catalysts Prepared by Sol Immobilization. Langmuir, 2010, 26, 16568-16577.	3.5	201
29	Solvent-free Oxidation of Primary Alcohols to Aldehydes using Supported Gold Catalysts. Catalysis Letters, 2005, 103, 43-52.	2.6	194
30	Advances in the direct synthesis of hydrogen peroxide from hydrogen and oxygen. Catalysis Today, 2015, 248, 3-9.	4.4	189
31	A Comparison of the Adsorption and Diffusion of Hydrogen on the {111} Surfaces of Ni, Pd, and Pt from Density Functional Theory Calculations. Journal of Physical Chemistry B, 2001, 105, 4889-4894.	2.6	184
32	Direct Synthesis of Hydrogen Peroxide from H2and O2Using Al2O3Supported Auâˆ’Pd Catalysts. Chemistry of Materials, 2006, 18, 2689-2695.	6.7	183
33	Direct synthesis of hydrogen peroxide from H2 and O2 using Auâ€“Pd/Fe2O3 catalysts. Journal of Materials Chemistry, 2005, 15, 4595.	6.7	180
34	Strategies for Designing Supported Goldâ€“Palladium Bimetallic Catalysts for the Direct Synthesis of Hydrogen Peroxide. Accounts of Chemical Research, 2014, 47, 845-854.	15.6	179
35	Onâ€“Off Porosity Switching in a Molecular Organic Solid. Angewandte Chemie - International Edition, 2011, 50, 749-753.	13.8	176
36	Strategies for the Synthesis of Supported Gold Palladium Nanoparticles with Controlled Morphology and Composition. Accounts of Chemical Research, 2013, 46, 1759-1772.	15.6	167

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37	Recent Advances in the Direct Synthesis of H₂O₂. ChemCatChem, 2019, 11, 298-308.	3.7	156
38	The relaxation of molecular crystal structures using a distributed multipole electrostatic model. Journal of Computational Chemistry, 1995, 16, 628-647.	3.3	154
39	Solvent free liquid phase oxidation of benzyl alcohol using Au supported catalysts prepared using a sol immobilization technique. Catalysis Today, 2007, 122, 317-324.	4.4	150
40	Cationic Terminal Borylenes by Halide Abstraction:Â Synthesis and Spectroscopic and Structural Characterization of an FeB Double Bond. Journal of the American Chemical Society, 2003, 125, 6356-6357.	13.7	148
41	Selective oxidation of CO in the presence of H2, H2O and CO2via gold for use in fuel cells. Chemical Communications, 2005, , 3385.	4.1	146
42	The (010) surface of Î±-MoO3, a DFT + U study. Physical Chemistry Chemical Physics, 2005, 7, 3819.	2.8	146
43	Oxidation of glycerol using goldâ€“palladium alloy-supported nanocrystals. Physical Chemistry Chemical Physics, 2009, 11, 4952.	2.8	144
44	Characterisation of gold catalysts. Chemical Society Reviews, 2016, 45, 4953-4994.	38.1	140
45	Aqua regia activated Au/C catalysts for the hydrochlorination of acetylene. Journal of Catalysis, 2013, 297, 128-136.	6.2	139
46	Solvent-free oxidation of benzyl alcohol using Auâ€“Pd catalysts prepared by sol immobilisation. Physical Chemistry Chemical Physics, 2009, 11, 5142.	2.8	138
47	Theory and simulation in heterogeneous gold catalysis. Chemical Society Reviews, 2008, 37, 2046.	38.1	136
48	Auâ€“Pd supported nanocrystals prepared by a sol immobilisation technique as catalysts for selective chemical synthesis. Physical Chemistry Chemical Physics, 2008, 10, 1921.	2.8	136
49	Supported gold catalysts for the total oxidation of alkanes and carbon monoxide. Applied Catalysis A: General, 2006, 312, 67-76.	4.3	134
50	Auâ€“Pd supported nanocrystals as catalysts for the direct synthesis of hydrogen peroxide from H₂and O₂. Green Chemistry, 2008, 10, 388-394.	9.0	131
51	Stable amorphous georgeite as a precursor to a high-activity catalyst. Nature, 2016, 531, 83-87.	27.8	128
52	Hydrocarbon formation from methanol and dimethyl ether: a review of the experimental observations concerning the mechanism of formation of the primary products. Catalysis Today, 1990, 6, 279-306.	4.4	125
53	Vanadium phosphate: a new look at the active components of catalysts for the oxidation of butane to maleic anhydride. Journal of Materials Chemistry, 2004, 14, 3385.	6.7	120
54	FeB Double Bonds:Â Synthetic, Structural, and Reaction Chemistry of Cationic Terminal Borylene Complexes. Organometallics, 2004, 23, 2911-2926.	2.3	119

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55	Elucidation and Evolution of the Active Component within Cu/Fe/ZSM-5 for Catalytic Methane Oxidation: From Synthesis to Catalysis. ACS Catalysis, 2013, 3, 689-699.	11.2	117
56	Continuous selective oxidation of methane to methanol over Cu- and Fe-modified ZSM-5 catalysts in a flow reactor. Catalysis Today, 2016, 270, 93-100.	4.4	113
57	Rubidium- and caesium-doped silicotungstic acid catalysts supported on alumina for the catalytic dehydration of glycerol to acrolein. Journal of Catalysis, 2012, 286, 206-213.	6.2	106
58	Efficient green methanol synthesis from glycerol. Nature Chemistry, 2015, 7, 1028-1032.	13.6	106
59	Synthesis, Antimalarial Activity, and Molecular Modeling of Tebuquine Analogues. Journal of Medicinal Chemistry, 1997, 40, 437-448.	6.4	105
60	Solvent-free oxidation of benzyl alcohol using titania-supported goldâ€“palladium catalysts: Effect of Auâ€“Pd ratio on catalytic performance. Catalysis Today, 2007, 122, 407-411.	4.4	104
61	Comparison of supports for the direct synthesis of hydrogen peroxide from H2 and O2 using Auâ€“Pd catalysts. Catalysis Today, 2007, 122, 397-402.	4.4	103
62	Catalytic and Mechanistic Insights of the Lowâ€Temperature Selective Oxidation of Methane over Cuâ€Promoted Feâ€ZSMâ€5. Chemistry - A European Journal, 2012, 18, 15735-15745.	3.3	102
63	Controlling the Duality of the Mechanism in Liquidâ€Phase Oxidation of Benzyl Alcohol Catalysed by Supported Auâ€“Pd Nanoparticles. Chemistry - A European Journal, 2011, 17, 6524-6532.	3.3	100
64	Aqueous-Phase Methane Oxidation over Fe-MFI Zeolites; Promotion through Isomorphous Framework Substitution. ACS Catalysis, 2013, 3, 1835-1844.	11.2	99
65	Selective Oxidation of Methane to Methanol Using Supported AuPd Catalysts Prepared by Stabilizer-Free Sol-Immobilization. ACS Catalysis, 2018, 8, 2567-2576.	11.2	99
66	Selective formation of lactate by oxidation of 1,2-propanediol using gold palladium alloy supported nanocrystals. Green Chemistry, 2009, 11, 1209.	9.0	97
67	Au-ZSM-5 catalyses the selective oxidation of CH4 to CH3OH and CH3COOH using O2. Nature Catalysis, 2022, 5, 45-54.	34.4	95
68	Effect of Reaction Conditions on the Direct Synthesis of Hydrogen Peroxide with a AuPd/TiO₂ Catalyst in a Flow Reactor. ACS Catalysis, 2013, 3, 487-501.	11.2	93
69	Selective oxidation of CO in the presence of H2, H2O and CO2utilising Au/Î±-Fe2O3catalysts for use in fuel cells. Journal of Materials Chemistry, 2006, 16, 199-208.	6.7	92
70	Low-temperature redox activity in co-precipitated catalysts: a comparison between gold and platinum-group metals. Catalysis Today, 2002, 72, 107-113.	4.4	91
71	Ruthenium Nanoparticles Supported on Carbon: An Active Catalyst for the Hydrogenation of Lactic Acid to 1,2-Propanediol. ACS Catalysis, 2015, 5, 5047-5059.	11.2	91
72	Hydrocarbon formation from methylating agents over the zeolite catalyst ZSM-5. Comments on the mechanism of carbonâ€“carbon bond and methane formation. Journal of the Chemical Society Faraday Transactions I, 1987, 83, 571.	1.0	90

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73	The role of the support in achieving high selectivity in the direct formation of hydrogen peroxide. Green Chemistry, 2008, 10, 1162.	9.0	89
74	Involvement of Surfaceâ€Bound Radicals in the Oxidation of Toluene Using Supported Auâ€Pd Nanoparticles. Angewandte Chemie - International Edition, 2012, 51, 5981-5985.	13.8	89
75	Control of product selectivity in the partial oxidation of methane. Nature, 1990, 348, 428-429.	27.8	87
76	The controlled catalytic oxidation of furfural to furoic acid using AuPd/Mg(OH)₂. Catalysis Science and Technology, 2017, 7, 5284-5293.	4.1	87
77	Synthesis of a Small-Pore Microporous Material Using a Computationally Designed Template. Angewandte Chemie International Edition in English, 1997, 36, 2675-2677.	4.4	85
78	Partial Oxidation of Ethane to Oxygenates Using Fe- and Cu-Containing ZSM-5. Journal of the American Chemical Society, 2013, 135, 11087-11099.	13.7	83
79	Elucidating the Role of CO₂ in the Soft Oxidative Dehydrogenation of Propane over Ceria-Based Catalysts. ACS Catalysis, 2018, 8, 3454-3468.	11.2	80
80	Metabolism-Dependent Neutrophil Cytotoxicity of Amodiaquine: A Comparison with Pyronaridine and Related Antimalarial Drugs. Chemical Research in Toxicology, 1998, 11, 1586-1595.	3.3	79
81	Co-precipitated copper zinc oxide catalysts for ambient temperature carbon monoxide oxidation: effect of precipitate ageing on catalyst activity. Physical Chemistry Chemical Physics, 2002, 4, 5915-5920.	2.8	79
82	Tailoring the selectivity of glycerol oxidation by tuning the acidâ€“base properties of Au catalysts. Catalysis Science and Technology, 2015, 5, 1126-1132.	4.1	78
83	Analysis of Bonding in Cyclopentadienyl Transition-Metal Boryl Complexes. Organometallics, 2002, 21, 1146-1157.	2.3	77
84	Cationic Terminal Borylene Complexes: Structure/Bonding Analysis and [4+1] Cycloaddition Reactivity of a BN Vinylidene Analogue. Angewandte Chemie - International Edition, 2006, 45, 6118-6122.	13.8	75
85	Oxidation of benzyl alcohol using supported goldâ€“palladium nanoparticles. Catalysis Today, 2011, 163, 47-54.	4.4	73
86	Baseâ€Free Oxidation of Glycerol Using Titaniaâ€Supported Trimetallic Auâ€“Pdâ€“Pt Nanoparticles. ChemSusChem, 2014, 7, 1326-1334.	6.8	73
87	Base-free glucose oxidation using air with supported gold catalysts. Green Chemistry, 2014, 16, 3132-3141.	9.0	71
88	High-activity Au/CuOâ€“ZnO catalysts for the oxidation of carbon monoxide at ambient temperature. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 187-188.	1.7	70
89	Methane Oxidation to Methanol in Water. Accounts of Chemical Research, 2021, 54, 2614-2623.	15.6	69
90	Nanocrystalline gold and goldâ€“palladium alloy oxidation catalysts: a personal reflection on the nature of the active sites. Dalton Transactions, 2008, , 5523.	3.3	68

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91	Effect of Halide and Acid Additives on the Direct Synthesis of Hydrogen Peroxide using Supported Goldâ€“Palladium Catalysts. ChemSusChem, 2009, 2, 575-580.	6.8	68
92	Identification of the catalytically active component of Cuâ€“Zrâ€“O catalyst for the hydrogenation of levulinic acid to Î³-valerolactone. Green Chemistry, 2017, 19, 225-236.	9.0	68
93	Complexes of a gallium heterocycle with transition metal dicyclopentadienyl and cyclopentadienylcarbonyl fragments, and with a dialkylmanganese compound. Dalton Transactions, 2006, , 3313.	3.3	66
94	Direct and oxidative dehydrogenation of propane: from catalyst design to industrial application. Green Chemistry, 2021, 23, 9747-9799.	9.0	66
95	Carbonyl analogues? Analysis of Feâ€“E (E = B, Al, Ga) bonding in cationic terminal diyl complexes by density functional theory. Dalton Transactions, 2004, , 2649-2654.	3.3	65
96	Switching-off toluene formation in the solvent-free oxidation of benzyl alcohol using supported trimetallic Auâ€“Pdâ€“Pt nanoparticles. Faraday Discussions, 2013, 162, 365.	3.2	65
97	CO adsorption over Pd nanoparticles: A general framework for IR simulations on nanoparticles. Surface Science, 2016, 646, 210-220.	1.9	65
98	Effect of heat treatment on Auâ€“Pd catalysts synthesized by sol immobilisation for the direct synthesis of hydrogen peroxide and benzyl alcoholoxidation. Catalysis Science and Technology, 2013, 3, 308-317.	4.1	64
99	Low temperature selective oxidation of methane to methanol using titania supported gold palladium copper catalysts. Catalysis Science and Technology, 2016, 6, 3410-3418.	4.1	64
100	The effect of catalyst preparation method on the performance of supported Auâ€“Pd catalysts for the direct synthesis of hydrogen peroxide. Green Chemistry, 2010, 12, 915.	9.0	63
101	Population and hierarchy of active species in gold iron oxide catalysts for carbon monoxide oxidation. Nature Communications, 2016, 7, 12905.	12.8	62
102	Solvent-free selective epoxidation of cyclooctene using supported gold catalysts. Green Chemistry, 2009, 11, 1037.	9.0	61
103	Heterogeneous Trimetallic Nanoparticles as Catalysts. Chemical Reviews, 2022, 122, 6795-6849.	47.7	61
104	A Group 13/Group 17 Analogue of CO and N₂: Coordinative Trapping of the GaI Molecule. Journal of the American Chemical Society, 2008, 130, 5449-5451.	13.7	60
105	Structure Sensitivity in Catalytic Hydrogenation at Platinum Surfaces Measured by Shell-Isolated Nanoparticle Enhanced Raman Spectroscopy (SHINERS). ACS Catalysis, 2016, 6, 1822-1832.	11.2	60
106	Atomistic Simulation of Micropore Structure, Surface Area, and Gas Sorption Properties for Amorphous Microporous Polymer Networks. Journal of Physical Chemistry C, 2008, 112, 20549-20559.	3.1	59
107	The functionalisation of graphite surfaces with nitric acid: Identification of functional groups and their effects on gold deposition. Journal of Catalysis, 2015, 323, 10-18.	6.2	59
108	Effect of the reaction conditions on the performance of Auâ€“Pd/TiO2 catalyst for the direct synthesis of hydrogen peroxide. Physical Chemistry Chemical Physics, 2010, 12, 2488.	2.8	58

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109	The selective oxidation of 1,2-propanediol to lactic acid using mild conditions and gold-based nanoparticulate catalysts. Catalysis Today, 2013, 203, 139-145.	4.4	58
110	Gold Catalysis: A Reflection on Where We are Now. Catalysis Letters, 2015, 145, 71-79.	2.6	56
111	The partial oxidation of methane to methanol: An approach to catalyst design. Catalysis Today, 1998, 42, 217-224.	4.4	55
112	The Structure of Metallomicelles. Chemistry - A European Journal, 2004, 10, 2022-2028.	3.3	55
113	HETEROGENEOUS ASYMMETRIC CATALYSTS: Strategies for Achieving High Enantioselection. Annual Review of Materials Research, 2005, 35, 143-166.	9.3	55
114	Solvent-free selective epoxidation of cyclooctene using supported gold catalysts: an investigation of catalyst re-use. Green Chemistry, 2011, 13, 127-134.	9.0	55
115	Catalytic heterogeneous aziridination of alkenes using microporous materials. Chemical Communications, 1998, , 1601-1602.	4.1	53
116	Halide Abstraction as a Route to Cationic Transition-Metal Complexes Containing Two-Coordinate Gallium and Indium Ligand Systems. Organometallics, 2005, 24, 5891-5900.	2.3	53
117	Base-free oxidation of glucose to gluconic acid using supported gold catalysts. Catalysis Science and Technology, 2016, 6, 107-117.	4.1	53
118	Gold, palladium and goldâ€"palladium supported nanoparticles for the synthesis of glycerol carbonate from glycerol and urea. Catalysis Science and Technology, 2012, 2, 1914.	4.1	52
119	Epoxidation of allyl alcohol to glycidol using titanium silicalite TS-1: effect of the method of preparation. Catalysis Letters, 1995, 33, 369-385.	2.6	51
120	Feâ€"Ga multiple bonding? Synthesis, spectroscopic and structural characterization of a transition metal complex containing a cationic two-coordinate gallium centre. Chemical Communications, 2004, , 1732-1733.	4.1	50
121	Density Functional Theory Calculations on the Interaction of Ethene with the {111} Surface of Platinum. Journal of Physical Chemistry B, 2000, 104, 6439-6446.	2.6	49
122	Cationic Terminal Gallylene Complexes by Halide Abstraction: Coordination Chemistry of a Valence Isoelectronic Analogue of CO and N₂. Journal of the American Chemical Society, 2008, 130, 16111-16124.	13.7	49
123	Epoxidation of allyl alcohol to glycidol using titanium silicalite TS-1: effect of the reaction conditions and catalyst acidity. Catalysis Letters, 1996, 39, 83-90.	2.6	48
124	Oxidation of crotyl alcohol using Ti-Î² and Ti-MCM-41 catalysts. Journal of Molecular Catalysis A, 2001, 165, 243-247.	4.8	48
125	Catalytic asymmetric heterogeneous aziridination of alkenes using zeolite CuHY with [N-(â€Šp-tolylsulfonyl)imino]phenyliodinane as nitrene donor. Journal of the Chemical Society Perkin Transactions II, 1999, , 1043.	0.9	47
126	Cationic Terminal Aminoborylene Complexes: Controlled Stepwise Insertion into Mï£¾B and Bï£¾N Double Bonds. Angewandte Chemie - International Edition, 2007, 46, 2043-2046.	13.8	47

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127	Designing oxidation catalysts. Catalysis Today, 1999, 49, 105-113.	4.4	46
128	Solvent Effect and Reactivity Trend in the Aerobic Oxidation of 1,3â€Propanediols over Gold Supported on Titania: NMR Diffusion and Relaxation Studies. Chemistry - A European Journal, 2013, 19, 11725-11732.	3.3	46
129	Light alkane oxidation using catalysts prepared by chemical vapour impregnation: tuning alcohol selectivity through catalyst pre-treatment. Chemical Science, 2014, 5, 3603-3616.	7.4	45
130	Liquid phase oxidation of cyclohexane using bimetallic Auâ€“Pd/MgO catalysts. Applied Catalysis A: General, 2015, 504, 373-380.	4.3	45
131	A Perspective on Heterogeneous Catalysts for the Selective Oxidation of Alcohols. Chemistry - A European Journal, 2021, 27, 16809-16833.	3.3	45
132	Intramolecular modulation of iron-based metal organic framework with energy level adjusting for efficient photocatalytic activity. Applied Catalysis B: Environmental, 2022, 302, 120823.	20.2	45
133	A density functional theory study of the adsorption of acetone to the (111) surface of Pt: Implications for hydrogenation catalysis. Catalysis Today, 2005, 105, 85-92.	4.4	43
134	In situ spectroscopic investigation of oxidative dehydrogenation and disproportionation of benzyl alcohol. Physical Chemistry Chemical Physics, 2013, 15, 12147.	2.8	43
135	Gas Diffusion in a Porous Organic Cage: Analysis of Dynamic Pore Connectivity Using Molecular Dynamics Simulations. Journal of Physical Chemistry C, 2014, 118, 12734-12743.	3.1	43
136	Methane Activation by Selective Oxidation. Topics in Catalysis, 2016, 59, 658-662.	2.8	43
137	Methanol conversion to hydrocarbons over zeolite catalysts: comments on the reaction mechanism for the formation of the first carbonâ€“carbon bond. Microporous and Mesoporous Materials, 1999, 29, 67-77.	4.4	42
138	The Direct Synthesis of H₂O₂ Using TSâ€1 Supported Catalysts. ChemCatChem, 2019, 11, 1673-1680.	3.7	42
139	Improvement of the catalytic performance of CuMnOx catalysts for CO oxidation by the addition of Au. New Journal of Chemistry, 2004, 28, 708.	2.8	40
140	Bespoke Force Field for Simulating the Molecular Dynamics of Porous Organic Cages. Journal of Physical Chemistry C, 2012, 116, 16639-16651.	3.1	40
141	The conversion of levulinic acid into Î³-valerolactone using Cuâ€“ZrO₂ catalysts. Catalysis Science and Technology, 2016, 6, 6022-6030.	4.1	40
142	Designing templates for the synthesis of microporous solids using de novo molecular design methods. Journal of Molecular Catalysis A, 1997, 119, 415-424.	4.8	38
143	In situ X-ray studies of crotyl alcohol selective oxidation over Au/Pd(111) surface alloys. Catalysis Today, 2009, 145, 251-257.	4.4	38
144	Physical mixing of metal acetates: a simple, scalable method to produce active chloride free bimetallic catalysts. Chemical Science, 2012, 3, 2965.	7.4	38

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145	Low temperature selective oxidation of methane using gold-palladium colloids. Catalysis Today, 2020, 342, 32-38.	4.4	38
146	Selective catalytic oxidation using supported goldâ€“platinum and palladiumâ€“platinum nanoalloys prepared by sol-immobilisation. Physical Chemistry Chemical Physics, 2013, 15, 10636.	2.8	37
147	Oxidation of thioethers and sulfoxides with hydrogen peroxide using TS-1 as catalyst. Physical Chemistry Chemical Physics, 2000, 2, 1523-1529.	2.8	36
148	The Effect of Grafting Zirconia and Ceria onto Alumina as a Support for Silicotungstic Acid for the Catalytic Dehydration of Glycerol to Acrolein. Chemistry - A European Journal, 2014, 20, 1743-1752.	3.3	36
149	Explicit Detection of the Mechanism of Platinum Nanoparticle Shape Control by Polyvinylpyrrolidone. Journal of Physical Chemistry C, 2016, 120, 7532-7542.	3.1	36
150	Pulsed-Field Gradient NMR Spectroscopic Studies of Alcohols in Supported Gold Catalysts. Journal of Physical Chemistry C, 2011, 115, 1073-1079.	3.1	35
151	The decomposition of H ₂ O ₂ over the components of Au/TiO ₂ Âcatalysts. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 1885-1899.	2.1	35
152	Systematic Study of the Oxidation of Methane Using Supported Gold Palladium Nanoparticles Under Mild Aqueous Conditions. Topics in Catalysis, 2013, 56, 1843-1857.	2.8	35
153	Addressing stability challenges of using bimetallic electrocatalysts: the case of goldâ€“palladium nanoalloys. Catalysis Science and Technology, 2017, 7, 1848-1856.	4.1	35
154	Deactivation studies of a carbon supported AuPt nanoparticulate catalyst in the liquid-phase aerobic oxidation of 1,2-propanediol. Catalysis Science and Technology, 2014, 4, 1313-1322.	4.1	34
155	Ab initio simulation of the interaction of hydrogen with the {111} surfaces of platinum, palladium and nickel. A possible explanation for their difference in hydrogenation activity. Chemical Communications, 2000, , 705-706.	4.1	33
156	Calculations on the adsorption of Au to MgO surfaces using SIESTA. Journal of Materials Chemistry, 2006, 16, 1978.	6.7	33
157	Insertion reactions of dicyclohexylcarbodiimide with aminoboranes, -boryls and -borylenes. Dalton Transactions, 2007, , 4405.	3.3	33
158	The Selective Oxidation of 1,2-Propanediol by Supported Gold-Based Nanoparticulate Catalysts. Topics in Catalysis, 2012, 55, 1283-1288.	2.8	33
159	Oxidative esterification of 1,2-propanediol using gold and gold-palladium supported nanoparticles. Catalysis Science and Technology, 2012, 2, 97-104.	4.1	32
160	Investigating the influence of acid sites in continuous methane oxidation with N₂O over Fe/MFI zeolites. Catalysis Science and Technology, 2018, 8, 154-163.	4.1	32
161	A Kinetic Study of Methane Partial Oxidation over Feâ€ZSMâ€5 Using N₂O as an Oxidant. ChemPhysChem, 2018, 19, 402-411.	2.1	31
162	Lowering the Operating Temperature of Perovskite Catalysts for N₂O Decomposition through Control of Preparation Methods. ACS Catalysis, 2020, 10, 5430-5442.	11.2	31

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163	Enantioselective Dehydration of Butan-2-ol Using Zeolite Y Modified with Dithiane Oxides. Journal of Catalysis, 1997, 167, 533-542.	6.2	30
164	Direct Observation of Enantiomer Discrimination of Epoxides by Chiral Salen Complexes Using ENDOR. Journal of the American Chemical Society, 2004, 126, 15660-15661.	13.7	30
165	A periodic DFT study of the activation of O2 by Au nanoparticles on Î±-Fe2O3. Faraday Discussions, 2011, 152, 135.	3.2	30
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