Gadi Rothenberg

List of Publications by Year
in descending order

229 papers	12,061 citations	25034 57 h-index	37204 96 g-index
265 all docs	265 docs citations	265 times ranked	14024 citing authors

#	Article	IF	Citations
1	Solid Acid Catalysts for Biodiesel Production â€"-Towards Sustainable Energy. Advanced Synthesis and Catalysis, 2006, 348, 75-81.	4.3	499
2	Transitionâ€metal nanoparticles: synthesis, stability and the leaching issue. Applied Organometallic Chemistry, 2008, 22, 288-299.	3.5	409
3	Understanding Solid/Solid Organic Reactions. Journal of the American Chemical Society, 2001, 123, 8701-8708.	13.7	408
4	The pros and cons of lignin valorisation in an integrated biorefinery. RSC Advances, 2014, 4, 25310-25318.	3.6	273
5	Copper-Catalyzed Suzuki Cross-Coupling Using Mixed Nanocluster Catalysts. Journal of the American Chemical Society, 2002, 124, 11858-11859.	13.7	265
6	Click Chemistry: Copper Clusters Catalyse the Cycloaddition of Azides with Terminal Alkynes. Advanced Synthesis and Catalysis, 2005, 347, 811-815.	4.3	260
7	Biodiesel by Catalytic Reactive Distillation Powered by Metal Oxides. Energy & Fuels, 2008, 22, 598-604.	5.1	229
8	Catalytic routes towards acrylic acid, adipic acid and Îµ-caprolactam starting from biorenewables. Green Chemistry, 2015, 17, 1341-1361.	9.0	228
9	Desulfurisation of oils using ionic liquids: selection of cationic and anionic components to enhance extraction efficiency. Green Chemistry, 2008, 10, 87-92.	9.0	219
10	Ion- and Atom-Leaching Mechanisms from Palladium Nanoparticles in Cross-Coupling Reactions. Chemistry - A European Journal, 2007, 13, 6908-6913.	3.3	218
11	Pd Nanoclusters in Cï£¿C Coupling Reactions: Proof of Leaching. Angewandte Chemie - International Edition, 2006, 45, 2886-2890.	13.8	209
12	The heterogeneous advantage: biodiesel by catalytic reactive distillation. Topics in Catalysis, 2006, 40, 141-150.	2.8	199
13	Biodegradable Plastics: Standards, Policies, and Impacts. ChemSusChem, 2021, 14, 56-72.	6.8	186
14	Palladium-free and ligand-free Sonogashira cross-coupling. Green Chemistry, 2004, 6, 215.	9.0	181
15	Lanthanide-Based Metal Organic Frameworks: Synthetic Strategies and Catalytic Applications. ACS Catalysis, 2016, 6, 6063-6072.	11.2	178
16	Anion and Cation Effects on Imidazolium Salt Melting Points: A Descriptor Modelling Study. ChemPhysChem, 2007, 8, 690-695.	2.1	173
17	Mesoporous Silica with Siteâ€Isolated Amine and Phosphotungstic Acid Groups: A Solid Catalyst with Tunable Antagonistic Functions for Oneâ€Pot Tandem Reactions. Angewandte Chemie - International Edition, 2011, 50, 9615-9619.	13.8	143
18	Copper-catalyzed homolytic and heterolytic benzylic and allylic oxidation using tert-butyl hydroperoxide. Journal of the Chemical Society Perkin Transactions II, 1998, , 2429-2434.	0.9	129

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19	A Critical Look at Direct Catalytic Hydrogenation of Carbon Dioxide to Olefins. ChemSusChem, 2019, 12, 3896-3914.	6.8	119
20	Sustainable selective oxidations using ceria-based materials. Green Chemistry, 2010, 12, 939.	9.0	115
21	Bimetallic catalysts for the Fischerâ€“Tropsch reaction. Green Chemistry, 2011, 13, 1950.	9.0	104
22	De Novo Design of Nanostructured Ironâ€“Cobalt Fischerâ€“Tropsch Catalysts. Angewandte Chemie - International Edition, 2013, 52, 4397-4401.	13.8	103
23	Lignin solubilisation and gentle fractionation in liquid ammonia. Green Chemistry, 2015, 17, 325-334.	9.0	100
24	Chiral imprinting of palladium with cinchona alkaloids. Nature Chemistry, 2009, 1, 160-164.	13.6	94
25	Sustainable Separations of C₄â€Hydrocarbons by Using Microporous Materials. ChemSusChem, 2017, 10, 3947-3963.	6.8	94
26	Predictive modeling in homogeneous catalysis: a tutorial. Chemical Society Reviews, 2010, 39, 1891.	38.1	92
27	Catalytic cleavage of lignin Î²-O-4 link mimics using copper on alumina and magnesiaâ€“alumina. Green Chemistry, 2013, 15, 768.	9.0	91
28	Palladium Nanoclusters in Sonogashira Cross-Coupling: A True Catalytic Species?. Advanced Synthesis and Catalysis, 2005, 347, 1965-1968.	4.3	88
29	Optimising an artificial neural network for predicting the melting point of ionic liquids. Physical Chemistry Chemical Physics, 2008, 10, 5826.	2.8	88
30	Efficient three-component coupling catalysed by mesoporous copperâ€“aluminum based nanocomposites. Green Chemistry, 2013, 15, 1238.	9.0	88
31	Palladium-catalyzed aryl-aryl coupling in water using molecular hydrogen: kinetics and process optimization of a solid-liquid-gas system. Tetrahedron, 1999, 55, 14763-14768.	1.9	87
32	Combinatorial Design of Copper-Based Mixed Nanoclusters: New Catalysts for Suzuki Cross-Coupling. Advanced Synthesis and Catalysis, 2003, 345, 979-985.	4.3	86
33	A Simple Synthesis of an Nâ€Doped Carbon ORR Catalyst: Hierarchical Micro/Meso/Macro Porosity and Graphitic Shells. Chemistry - A European Journal, 2016, 22, 501-505.	3.3	86
34	Dual-mode humidity detection using a lanthanide-based metalâ€“organic framework: towards multifunctional humidity sensors. Chemical Communications, 2017, 53, 4465-4468.	4.1	84
35	Hemicellulose hydrolysis catalysed by solid acids. Catalysis Science and Technology, 2013, 3, 2057.	4.1	82
36	Electroreductive Palladium-Catalysed Ullmann Reactions in Ionic Liquids: Scope and Mechanism. Advanced Synthesis and Catalysis, 2006, 348, 1705-1710.	4.3	79

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37	Sieving di-branched from mono-branched and linear alkanes using ZIF-8: experimental proof and theoretical explanation. Physical Chemistry Chemical Physics, 2013, 15, 8795.	2.8	76
38	Palladium-coated nickel nanoclusters: new Hiyama cross-coupling catalysts. Physical Chemistry Chemical Physics, 2006, 8, 151-157.	2.8	74
39	Enhanced Heterogeneous Catalytic Conversion of Furfuryl Alcohol into Butyl Levulinate. ChemSusChem, 2014, 7, 835-840.	6.8	74
40	A membrane-free flow electrolyzer operating at high current density using earth-abundant catalysts for water splitting. Nature Communications, 2021, 12, 4143.	12.8	73
41	Air Pollution in Europe. ChemSusChem, 2019, 12, 164-172.	6.8	72
42	In Silico Design in Homogeneous Catalysis Using Descriptor Modelling. International Journal of Molecular Sciences, 2006, 7, 375-404.	4.1	71
43	On the Mechanism of Palladium-Catalyzed Coupling of Haloaryls to Biaryls in Water with Zinc. Organic Letters, 2000, 2, 211-214.	4.6	69
44	Selective CO oxidation in the presence of hydrogen: fast parallel screening and mechanistic studies on ceria-based catalysts. Journal of Catalysis, 2004, 225, 489-497.	6.2	69
45	Glycerol Valorization: Dehydration to Acrolein Over Silica-Supported Niobia Catalysts. Topics in Catalysis, 2010, 53, 1217-1223.	2.8	69
46	Combinatorial Explosion in Homogeneous Catalysis: Screening 60,000 Cross-Coupling Reactions. Advanced Synthesis and Catalysis, 2004, 346, 1844-1853.	4.3	68
47	Comparative study of phenol alkylation mechanisms using homogeneous and silica-supported boron trifluoride catalysts. Journal of Molecular Catalysis A, 2000, 159, 309-314.	4.8	67
48	Vanadium-Catalysed Oxidative Bromination Using Dilute Mineral Acids and Hydrogen Peroxide:Â An Option for Recycling Waste Acid Streams. Organic Process Research and Development, 2000, 4, 270-274.	2.7	67
49	Selective Hydrogenation of 5â€Ethoxymethylfurfural over Aluminaâ€Supported Heterogeneous Catalysts. Advanced Synthesis and Catalysis, 2009, 351, 3175-3185.	4.3	67
50	Ru/TiO2-catalysed hydrogenation of xylose: the role of the crystal structure of the support. Catalysis Science and Technology, 2016, 6, 577-582.	4.1	65
51	One-pot Pd/C catalysed â€˜dominoâ€™ HALEX and Sonogashira reactions: a ligand- and Cu-free alternative. Organic and Biomolecular Chemistry, 2006, 4, 111-115.	2.8	64
52	Heterogeneous Palladium-Catalysed Heck Reaction of Aryl Chlorides and Styrene in Water Under Mild Conditions. Advanced Synthesis and Catalysis, 2002, 344, 348-354.	4.3	63
53	In Situ Spectroscopic Analysis of Nanocluster Formation. ChemPhysChem, 2004, 5, 93-98.	2.1	61
54	In-situ UV-visible study of Pd nanocluster formation in solution. Physical Chemistry Chemical Physics, 2006, 8, 3669.	2.8	61

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55	Selective Autooxidation of Ethanol over Titaniaâ€Supported Molybdenum Oxide Catalysts: Structure and Reactivity. Advanced Synthesis and Catalysis, 2012, 354, 1327-1336.	4.3	61
56	High proton conductivity in cyanide-bridged metalâ€“organic frameworks: understanding the role of water. Journal of Materials Chemistry A, 2015, 3, 22347-22352.	10.3	61
57	The Ti₃AlC₂ MAX Phase as an Efficient Catalyst for Oxidative Dehydrogenation of nâ€Butane. Angewandte Chemie - International Edition, 2018, 57, 1485-1490.	13.8	61
58	Redox properties of doped and supported copperâ€“ceria catalysts. Dalton Transactions, 2008, , 6573.	3.3	60
59	Air Oxidation of Benzene to Biphenyl - A Dual Catalytic Approach. Advanced Synthesis and Catalysis, 2001, 343, 455-459.	4.3	58
60	Highly Selective Water Adsorption in a Lanthanum Metalâ€“Organic Framework. Chemistry - A European Journal, 2014, 20, 7922-7925.	3.3	58
61	Kinetics and mechanism of heterogeneous palladium-catalyzed coupling reactions of chloroaryls in water. Journal of the Chemical Society Perkin Transactions II, 1999, , 2481-2484.	0.9	57
62	Developing hierarchically porous MnO_x/NC hybrid nanorods for oxygen reduction and evolution catalysis. Green Chemistry, 2017, 19, 2793-2797.	9.0	57
63	New Device and Method for Flux-Proportional Sampling of Mobile Solutes in Soil and Groundwater. Environmental Science & Technology, 2005, 39, 274-282.	10.0	56
64	Design and Assembly of Virtual Homogeneous Catalyst Libraries â€“Towardsin silico Catalyst Optimisation. Advanced Synthesis and Catalysis, 2006, 348, 361-369.	4.3	56
65	CO₂ Hydrogenation at Atmospheric Pressure and Low Temperature Using Plasma-Enhanced Catalysis over Supported Cobalt Oxide Catalysts. ACS Sustainable Chemistry and Engineering, 2020, 8, 17397-17407.	6.7	56
66	Tuning the nanopore structure and separation behavior of hybrid organosilica membranes. Microporous and Mesoporous Materials, 2014, 185, 224-234.	4.4	54
67	Comparative autoxidation of 3-Carene and Î±-Pinene: Factors governing regioselective hydrogen abstraction reactions. Tetrahedron, 1998, 54, 593-598.	1.9	53
68	Tandem One-Pot Palladium-Catalyzed Reductive and Oxidative Coupling of Benzene and Chlorobenzene. Journal of Organic Chemistry, 2000, 65, 3107-3110.	3.2	53
69	Heterogeneous catalyst discovery using 21st century tools: a tutorial. RSC Advances, 2014, 4, 5963.	3.6	52
70	On oxyhalogenation, acids, and non-mimics of bromoperoxidase enzymes. Green Chemistry, 2000, 2, 248-251.	9.0	51
71	Kinetics and mechanism of plasmid DNA penetration through nanopores. Journal of Membrane Science, 2011, 371, 45-51.	8.2	51
72	Data mining in catalysis: Separating knowledge from garbage. Catalysis Today, 2008, 137, 2-10.	4.4	50

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73	Sulfated zirconia as a robust superacid catalyst for multiproduct fatty acid esterification. Catalysis Science and Technology, 2012, 2, 1500.	4.1	50
74	Regiospecific cross-coupling of haloaryls and pyridine to 2-phenylpyridine using water, zinc, and catalytic palladium on carbon. Perkin Transactions II RSC, 2000, , 1809-1812.	1.1	49
75	Insights into Sonogashira Crossâ€•Coupling by Highâ€•Throughput Kinetics and Descriptor Modeling. Chemistry - A European Journal, 2008, 14, 2857-2866.	3.3	49
76	Catâ€•inâ€•aâ€•Cup: Facile Separation of Large Homogeneous Catalysts. Angewandte Chemie - International Edition, 2008, 47, 5407-5410.	13.8	48
77	Solvent-Free Synthesis of Rechargeable Solid Oxygen Reservoirs for Clean Hydrogen Oxidation. Angewandte Chemie - International Edition, 2003, 42, 3366-3368.	13.8	47
78	Revisiting Hansen Solubility Parameters by Including Thermodynamics. ChemPhysChem, 2017, 18, 2999-3006.	2.1	47
79	Beyond Lithium-Based Batteries. Materials, 2020, 13, 425.	2.9	47
80	Supported phase-transfer catalysts as selective agents in biphenyl synthesis from haloaryls. Tetrahedron Letters, 2001, 42, 6117-6119.	1.4	46
81	Topological Mapping of Bidentate Ligands: A Fast Approach for Screening Homogeneous Catalysts. Advanced Synthesis and Catalysis, 2005, 347, 1969-1977.	4.3	46
82	A â€œGreen Routeâ€• to Propene through Selective Hydrogen Oxidation. Chemistry - A European Journal, 2007, 13, 5121-5128.	3.3	46
83	Kinetics of propane dehydrogenation over Ptâ€“Sn/Al₂O₃. Catalysis Science and Technology, 2013, 3, 962-971.	4.1	46
84	The evolution of hierarchical porosity in self-templated nitrogen-doped carbons and its effect on oxygen reduction electrocatalysis. RSC Advances, 2016, 6, 80398-80407.	3.6	46
85	An Anionâ€•Exchange Membrane Fuel Cell Containing Only Abundant and Affordable Materials. Energy Technology, 2021, 9, 2000909.	3.8	46
86	Palladium nanoclusters in microcapsule membranes: From synthetic shells to synthetic cells. Physical Chemistry Chemical Physics, 2005, 7, 2237.	2.8	45
87	Highly Selective Hydrogenation of Levulinic Acid to Î³-Valerolactone Over Ru/ZrO2 Catalysts. Catalysis Letters, 2017, 147, 1744-1753.	2.6	44
88	A facile building-block synthesis of multifunctional lanthanide MOFs. Journal of Materials Chemistry, 2011, 21, 15544.	6.7	43
89	A rational synthesis of hierarchically porous, N-doped carbon from Mg-based MOFs: understanding the link between nitrogen content and oxygen reduction electrocatalysis. Physical Chemistry Chemical Physics, 2016, 18, 20778-20783.	2.8	42
90	Cooperative Catalysis for Selective Alcohol Oxidation with Molecular Oxygen. Chemistry - A European Journal, 2016, 22, 12307-12311.	3.3	42

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91	Selective Catalytic Oxidation of Cyclohexene with Molecular Oxygen: Radical Versus Nonradical Pathways. ChemCatChem, 2018, 10, 1035-1041.	3.7	42
92	Self-Assembly of a Hexagonal Phase of Wormlike Micelles Containing Metal Nanoclusters. Langmuir, 2004, 20, 477-483.	3.5	41
93	Titania-catalysed oxidative dehydrogenation of ethyl lactate: effective yet selective free-radical oxidation. Green Chemistry, 2014, 16, 3358-3363.	9.0	41
94	Plasma Assisted Catalytic Conversion of CO2 and H2O Over Ni/Al2O3 in a DBD Reactor. Plasma Chemistry and Plasma Processing, 2019, 39, 109-124.	2.4	40
95	Optimal Heck Cross-Coupling Catalysis: A Pseudo-Pharmaceutical Approach. Advanced Synthesis and Catalysis, 2003, 345, 1334-1340.	4.3	39
96	Matter of age: growing anisotropic gold nanocrystals in organic media. Physical Chemistry Chemical Physics, 2008, 10, 951-956.	2.8	38
97	Palladiumâ€Catalysed Telomerisation of Isoprene with Glycerol and Polyethylene Glycol: A Facile Route to New Terpene Derivatives. Advanced Synthesis and Catalysis, 2009, 351, 325-330.	4.3	38
98	Highly Selective Oxidation of Ethyl Lactate to Ethyl Pyruvate Catalyzed by Mesoporous Vanadiaâ€"Titania. ACS Catalysis, 2018, 8, 2365-2374.	11.2	38
99	Boosting the Supercapacitance of Nitrogenâ€Doped Carbon by Tuning Surface Functionalities. ChemSusChem, 2017, 10, 4018-4024.	6.8	38
100	A Simple Method for Measuring the Size of Metal Nanoclusters in Solution. Journal of Physical Chemistry B, 2006, 110, 17437-17443.	2.6	37
101	Ligand Descriptor Analysis in Nickel-Catalysed Hydrocyanation: A Combined Experimental and Theoretical Study. Advanced Synthesis and Catalysis, 2005, 347, 803-810.	4.3	36
102	Understanding Catalytic Biomass Conversion Through Data Mining. Topics in Catalysis, 2010, 53, 1202-1208.	2.8	36
103	One-Pot Selective Conversion of Hemicellulose to Xylitol. Organic Process Research and Development, 2017, 21, 165-170.	2.7	36
104	Preventing sintering of Au and Ag nanoparticles in silica-based hybrid gels using phenyl spacer groups. Journal of Materials Chemistry, 2010, 20, 3840.	6.7	35
105	Solidâ€"solid palladium-catalysed water reduction with zinc: mechanisms of hydrogen generation and direct hydrogen transfer reactions. New Journal of Chemistry, 2000, 24, 305-308.	2.8	34
106	Novel and Effective Copperâ€"Aluminum Propane Dehydrogenation Catalysts. Chemistry - A European Journal, 2011, 17, 12254-12256.	3.3	34
107	Enhancing the performance of 3D porous N-doped carbon in oxygen reduction reaction and supercapacitor via boosting the meso-macropore interconnectivity using the â€œexsolvedâ€• dual-template. Carbon, 2018, 129, 293-300.	10.3	34
108	Understanding Oxygen Activation on Metal- and Nitrogen-Codoped Carbon Catalysts. ACS Catalysis, 2018, 8, 8618-8629.	11.2	34

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109	Pyridines as bifunctional co-catalysts in the CrO3-catalyzed oxygenation of olefins by t-butyl hydroperoxide. Journal of Molecular Catalysis A, 1998, 136, 253-262.	4.8	33
110	Predicting adsorption on metals: simple yet effective descriptors for surface catalysis. Physical Chemistry Chemical Physics, 2013, 15, 4436.	2.8	33
111	Synthesis, characterization and testing of a new V2O5/Al2O3â€"MgO catalyst for butane dehydrogenation and limonene oxidation. Dalton Transactions, 2013, 42, 5546.	3.3	33
112	Design and Parallel Synthesis of Novel Selective Hydrogen Oxidation Catalysts and their Application in Alkane Dehydrogenation. Advanced Synthesis and Catalysis, 2002, 344, 884-889.	4.3	32
113	Detailed Mechanistic Studies usingin situ Spectroscopic Analysis: A Look at Little-Known Regions of the Heck Reaction. Advanced Synthesis and Catalysis, 2004, 346, 467-473.	4.3	32
114	Redox Kinetics of Ceriaâ€Based Mixed Oxides in Selective Hydrogen Combustion. ChemPhysChem, 2007, 8, 2490-2497.	2.1	32
115	Discovery and Understanding of the Ambient-Condition Degradation of Doped Barium Cerate Proton-Conducting Perovskite Oxide in Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2015, 162, F1408-F1414.	2.9	31
116	Understanding the oxidative dehydrogenation of ethyl lactate to ethyl pyruvate over vanadia/titania. Catalysis Science and Technology, 2018, 8, 3737-3747.	4.1	31
117	Facile Synthesis of a Novel Hierarchical ZSMâ€5 Zeolite: A Stable Acid Catalyst for Dehydrating Glycerol to Acrolein. ChemCatChem, 2018, 10, 211-221.	3.7	31
118	Interrelation of Chemistry and Process Design in Biodiesel Manufacturing by Heterogeneous Catalysis. Topics in Catalysis, 2010, 53, 1197-1201.	2.8	30
119	Adsorption of hexane isomers on MFI type zeolites at ambient temperature: Understanding the aluminium content effect. Microporous and Mesoporous Materials, 2013, 170, 26-35.	4.4	30
120	Backbone Diversity Analysis in Catalyst Design. Advanced Synthesis and Catalysis, 2009, 351, 387-396.	4.3	28
121	Pt0.02Sn0.003Mg0.06 on Î³-alumina: a stable catalyst for oxidative dehydrogenation of ethane. Applied Catalysis A: General, 2005, 278, 187-194.	4.3	27
122	Efficient alkyne homocoupling catalysed by copper immobilized on functionalized silica. Applied Organometallic Chemistry, 2013, 27, 23-27.	3.5	27
123	Understanding the solar-driven reduction of CO₂ on doped ceria. RSC Advances, 2014, 4, 16456-16463.	3.6	27
124	Silica-supported sulfonic acids as recyclable catalyst for esterification of levulinic acid with stoichiometric amounts of alcohols. Beilstein Journal of Organic Chemistry, 2016, 12, 2173-2180.	2.2	27
125	Trapping Metal Nanoclusters in â€œSoap and Waterâ€•Soft Crystals. ChemPhysChem, 2003, 4, 526-528.	2.1	26
126	Clean Diesel Power via Microwave Susceptible Oxidation Catalysts. ChemPhysChem, 2006, 7, 747-755.	2.1	26

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127	Developing a Thermal- and Coking-Resistant Cobaltâ€“Tungsten Bimetallic Anode Catalyst for Solid Oxide Fuel Cells. ACS Catalysis, 2016, 6, 4630-4634.	11.2	26
128	Predicting the performance of oxidation catalysts using descriptor models. Catalysis Science and Technology, 2016, 6, 125-133.	4.1	26
129	Tuning of Conversion and Optical Emission by Electron Temperature in Inductively Coupled CO₂ Plasma. Journal of Physical Chemistry C, 2018, 122, 19338-19347.	3.1	26
130	Efficient Separation of Ethanolâ€“Methanol and Ethanolâ€“Water Mixtures Using ZIF-8 Supported on a Hierarchical Porous Mixed-Oxide Substrate. ACS Applied Materials & Interfaces, 2019, 11, 21126-21136.	8.0	26
131	Butane Dry Reforming Catalyzed by Cobalt Oxide Supported on Ti₂AlC MAX Phase. ChemSusChem, 2020, 13, 6401-6408.	6.8	26
132	Unusual phase transfer mechanism of the ruthenium-catalyzed oxidation of alcohols with hydrogen peroxide. Tetrahedron, 1999, 55, 6301-6310.	1.9	25
133	?Hot Spot? Hydrocarbon Oxidation Catalysed by Doped Perovskites?Towards Cleaner Diesel Power. ChemPhysChem, 2005, 6, 223-225.	2.1	25
134	The Ti₃AlC₂ MAX Phase as an Efficient Catalyst for Oxidative Dehydrogenation of nâ€Butane. Angewandte Chemie, 2018, 130, 1501-1506.	2.0	25
135	A high-temperature anion-exchange membrane fuel cell with a critical raw material-free cathode. Chemical Engineering Journal Advances, 2021, 8, 100153.	5.2	25
136	Exploring the Activated State of Cu/ZnO(0001)â€“Zn, a Model Catalyst for Methanol Synthesis. Journal of Physical Chemistry C, 2012, 116, 19335-19341.	3.1	24
137	An experimental approach for controlling confinement effects at catalyst interfaces. Chemical Science, 2020, 11, 11024-11029.	7.4	24
138	An effective modular process for biodiesel manufacturing using heterogeneous catalysis. Catalysis Science and Technology, 2016, 6, 6097-6108.	4.1	23
139	Selective Hydrogen Oxidation Catalysts <i>via</i> Genetic Algorithms. Advanced Synthesis and Catalysis, 2008, 350, 2237-2249.	4.3	22
140	Finding Furfural Hydrogenation Catalysts <i>via</i> Predictive Modelling. Advanced Synthesis and Catalysis, 2010, 352, 2201-2210.	4.3	22
141	Designing effective solid catalysts for biomass conversion: aerobic oxidation of ethyl lactate to ethyl pyruvate. Green Chemistry, 2018, 20, 1866-1873.	9.0	22
142	Two-Step Catalytic Oxidative Dehydrogenation of Propane:Â An Alternative Route to Propene. Organic Process Research and Development, 2005, 9, 397-403.	2.7	21
143	Selective Hydrogen Oxidation in the Presence of C₃ Hydrocarbons Using Perovskite Oxygen Reservoirs. ChemPhysChem, 2008, 9, 1062-1068.	2.1	21
144	Hydrocarbon Oxidation with H2O2, Catalyzed by Iron Complexes with a Polydentate Pyridine-Based Ligand. Topics in Catalysis, 2010, 53, 1039-1044.	2.8	21

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145	Modeling Catalyst Preparation: The Structure of Impregnatedâ€“Dried Copper Chloride on Î³-Alumina at Low Loadings. ACS Catalysis, 2013, 3, 1545-1554.	11.2	20
146	Oxidative Dehydrogenation of n-Butane: Activity and Kinetics Over VO x /Al2O3 Catalysts. Topics in Catalysis, 2014, 57, 1400-1406.	2.8	20
147	Catalytic acetoxylation of lactic acid to 2-acetoxypropionic acid, en route to acrylic acid. RSC Advances, 2015, 5, 4103-4108.	3.6	20
148	Efficient oxygen reduction to H2O2 in highly porous manganese and nitrogen co-doped carbon nanorods enabling electro-degradation of bulk organics. Carbon, 2019, 155, 643-649.	10.3	19
149	Understanding the roles of amorphous domains and oxygen-containing groups of nitrogen-doped carbon in oxygen reduction catalysis: toward superior activity. Inorganic Chemistry Frontiers, 2020, 7, 177-185.	6.0	19
150	Bismuthâ€Doped Ceria, Ce_{0.90}Bi_{0.10}O₂: A Selective and Stable Catalyst for Clean Hydrogen Combustion. Advanced Synthesis and Catalysis, 2009, 351, 1557-1566.	4.3	18
151	A facile route to rutheniumâ€“carbene complexes and their application in furfural hydrogenation. Applied Organometallic Chemistry, 2010, 24, 142-146.	3.5	18
152	Marrying gas power and hydrogen energy: A catalytic system for combining methane conversion and hydrogen generation. Green Chemistry, 2009, 11, 921.	9.0	18
153	Reductive Dealkylation of Anisole and Phenetole: Towards Practical Lignin Conversion. European Journal of Organic Chemistry, 2011, 2011, 5246-5249.	2.4	18
154	Selective Aerobic Oxidation of Lactate to Pyruvate Catalyzed by Vanadiumâ€Nitrogenâ€Doped Carbon Nanosheets. ChemCatChem, 2019, 11, 3381-3387.	3.7	18
155	A simple synthesis of symmetric phthalocyanines and their respective perfluoro and transitionâ€metal complexes. Applied Organometallic Chemistry, 2019, 33, e4872.	3.5	18
156	Tracking Chemical Kinetics in High-Throughput Systems. Chemistry - A European Journal, 2003, 9, 3876-3881.	3.3	17
157	New tricks by very old dogs: predicting the catalytic hydrogenation of HMF derivatives using Slater-type orbitals. Catalysis Science and Technology, 2012, 2, 2456.	4.1	17
158	Dissolving Lignin in Water through Enzymatic Sulfation with Aryl Sulfotransferase. ChemSusChem, 2017, 10, 2267-2273.	6.8	17
159	Dry Reforming of Methane under Mild Conditions Using Radio Frequency Plasma. Energy Technology, 2020, 8, 1900886.	3.8	17
160	Self-Exfoliated Synthesis of Transition Metal Phosphate Nanolayers for Selective Aerobic Oxidation of Ethyl Lactate to Ethyl Pyruvate. ACS Catalysis, 2020, 10, 3958-3967.	11.2	17
161	Surface oxidation of Ti₃C₂T_x enhances the catalytic activity of supported platinum nanoparticles in ammonia borane hydrolysis. 2D Materials, 2021, 8, 015001.	4.4	17
162	Tuning the Selectivity of Heterogeneous Catalysts: A Trimetallic Approach to Reductive Coupling of Chloroarenes in Water. Advanced Synthesis and Catalysis, 2001, 343, 274-278.	4.3	16

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163	Transferable basis sets of numerical atomic orbitals. Physical Review B, 2012, 85, .	3.2	15
164	Lignin Depolymerisation and Lignocellulose Fractionation by Solvated Electrons in Liquid Ammonia. ChemSusChem, 2017, 10, 1022-1032.	6.8	15
165	Cooperative Surfaceâ€Particle Catalysis: The Role of the â€œActive Doughnutâ€•in Catalytic Oxidation. ChemCatChem, 2018, 10, 2119-2124.	3.7	15
166	Molybdenum Oxide Supported on Ti₃AlC₂ is an Active Reverse Waterâ€“Gas Shift Catalyst. ACS Sustainable Chemistry and Engineering, 2021, 9, 4957-4966.	6.7	15
167	Enhancing catalytic epoxide ring-opening selectivity using surface-modified Ti₃C₂T _x MXenes. 2D Materials, 2021, 8, 035003.	4.4	15
168	Extending the Haloform reaction to non-methyl ketones: Oxidative cleavage of cycloalkanones to dicarboxylic acids using sodium hypochlorite under Phase Transfer Catalysis conditions. Tetrahedron, 1996, 52, 13641-13648.	1.9	14
169	Model Selection and Optimal Sampling in High-Throughput Experimentation. Analytical Chemistry, 2004, 76, 3171-3178.	6.5	14
170	The best of both worlds. Nature Chemistry, 2010, 2, 9-10.	13.6	14
171	The surface evolution of La0.4Sr0.6TiO3+Î´ anode in solid oxide fuel cells: Understanding the sulfur-promotion effect. Journal of Power Sources, 2017, 343, 127-134.	7.8	14
172	Enhancing CO2 plasma conversion using metal grid catalysts. Journal of Applied Physics, 2021, 129, .	2.5	14
173	Optimal on-line sampling of parallel reactions: general concept and a specific spectroscopic example. Catalysis Today, 2003, 81, 359-367.	4.4	13
174	Environmentally Benign Bifunctional Solid Acid and Base Catalysts. Industrial & Engineering Chemistry Research, 2014, 53, 18722-18728.	3.7	13
175	A Simple and Efficient Device and Method for Measuring the Kinetics of Gasâ€Producing Reactions. Angewandte Chemie - International Edition, 2019, 58, 17273-17276.	13.8	13
176	Kinetic and mechanistic studies on the Heck reaction using real-time near infrared spectroscopy. Physical Chemistry Chemical Physics, 2003, 5, 4455-4460.	2.8	12
177	Redes metalorgÃ¢nicas e suas aplicaÃ§Ãµes em catÃ¡lise. Quimica Nova, 2014, 37, 123-133.	0.3	12
178	Organosilane oxidation by water catalysed by large gold nanoparticles in a membrane reactor. Catalysis Science and Technology, 2014, 4, 2156-2160.	4.1	12
179	Designing bifunctional alkene isomerization catalysts using predictive modelling. Catalysis Science and Technology, 2017, 7, 4842-4851.	4.1	12
180	Coordination polymers from alkaline-earth nodes and pyrazine carboxylate linkers. Dalton Transactions, 2018, 47, 10071-10079.	3.3	12

#	Article	IF	Citations
181	A Simple Buildingâ€Block Route to (Phosphanylâ€carbene)palladium Complexes via Intermolecular Addition of Functionalised Phosphanes to Isocyanides. European Journal of Inorganic Chemistry, 2009, 2009, 1313-1316.	2.0	11
182	Lead-containing solid â€œoxygen reservoirsâ€•for selective hydrogen combustion. Green Chemistry, 2009, 11, 1550.	9.0	11
183	Plasmaâ€Assisted Synthesis of Monodispersed and Robust Ruthenium Ultrafine Nanocatalysts for Organosilane Oxidation and Oxygen Evolution Reactions. ChemCatChem, 2017, 9, 4159-4163.	3.7	11
184	Selective CO₂ adsorption in water-stable alkaline-earth based metalâ€“organic frameworks. Inorganic Chemistry Frontiers, 2018, 5, 541-549.	6.0	11
185	Solvent-Free Synthesis of Rechargeable Solid Oxygen Reservoirs for Clean Hydrogen Oxidation. Angewandte Chemie, 2003, 115, 3488-3490.	2.0	10
186	Glycerol Esters from Real Waste Cooking Oil Using a Robust Solid Acid Catalyst. Topics in Catalysis, 2014, 57, 1545-1549.	2.8	10
187	Kinetic Studies of Cascade Reactions in High-Throughput Systems. Analytical Chemistry, 2003, 75, 6701-6707.	6.5	9
188	Plantics-GX: a biodegradable and cost-effective thermoset plastic that is 100% plant-based. Faraday Discussions, 2017, 202, 111-120.	3.2	9
189	Tackling Calibration Problems of Spectroscopic Analysis in High-Throughput Experimentation. Analytical Chemistry, 2005, 77, 2227-2234.	6.5	8
190	Ce0.95Cr0.05O2 and Ce0.97Cu0.03O2: active, selective and stable catalysts for selective hydrogen combustion. Dalton Transactions, 2009, , 5673.	3.3	8
191	Stable â€˜soap and waterâ€™ sponges doped with metal nanoparticles. Soft Matter, 2009, 5, 1994.	2.7	8
192	Practical Issues in Catalytic and Hydrothermal Biomass Conversion: Concentration Effects on Reaction Pathways. Topics in Catalysis, 2010, 53, 1258-1263.	2.8	8
193	A novel one-dimensional chain built of vanadyl ions and pyrazine-2,5-dicarboxylate. Dalton Transactions, 2015, 44, 11380-11387.	3.3	8
194	Converting Waste Toilet Paper into Electricity: Aâ€‰Firstâ€Stage Technoeconomic Feasibility Study. Energy Technology, 2017, 5, 2189-2197.	3.8	8
195	Cyclic vs. acyclic allylic hydrogen abstraction: An entropy motivated process?. Tetrahedron, 1998, 54, 5417-5422.	1.9	7
196	Assessing the removal of inorganic colloids and Cryptosporidium parvum from drinking water. Journal of Environmental Monitoring, 2002, 4, 244-248.	2.1	7
197	Estimating kinetic parameters of complex catalytic reactions using a curve resolution based method. Chemometrics and Intelligent Laboratory Systems, 2008, 91, 101-109.	3.5	7
198	Micropore characteristics of organic matter pools in cemented and nonâ€cemented podzolic horizons. European Journal of Soil Science, 2014, 65, 763-773.	3.9	7

#	Article	IF	Citations
199	A new simple method for the synthesis of cyclobutyl cyanide. Tetrahedron Letters, 1998, 39, 3093-3094.	1.4	6
200	Competing bromination and oxidation pathways in acid bromate solutions: an experimental and theoretical studyElectronic supplementary information (ESI) available: details of continuous flow EPR experiments; compound characterisation data (1H NMR, MS) for the bromination of benzaldehyde. See http://www.rsc.org/suppdata/p2/b1/b108009a/. Perkin Transactions II RSC, 2002, , 630-635.	1.1	6
201	Solid/Liquid Palladium-Catalyzed Coupling of Haloaryls Using Alcohols as Reducing Agents:Â Kinetics and Process Optimization. Organic Process Research and Development, 2003, 7, 109-114.	2.7	6
202	Understanding the redox behaviour of PbCrO4 and its application in selective hydrogen combustion. Dalton Transactions, 2012, 41, 12289.	3.3	6
203	Assembling Palladium and Cuprous Oxide Nanoclusters into Single Quantum Dots for the Electrocatalytic Oxidation of Formaldehyde, Ethanol, and Glucose. ACS Applied Nano Materials, 2020, 3, 10176-10182.	5.0	6
204	Conversion of CO2by non- thermal inductively-coupled plasma catalysis. Chinese Journal of Chemical Physics, 2020, 33, 243-251.	1.3	6
205	Designing Circular Waste Management Strategies: The Case of Organic Waste in Amsterdam. Advanced Sustainable Systems, 2020, 4, 2000023.	5.3	6
206	Ruthenium on Alkaliâ€Exfoliated Ti₃(Al_{0.8}Sn_{0.2})C₂ MAX Phase Catalyses Reduction of 4â€Nitroaniline with Ammonia Borane. ChemCatChem, 2021, 13, 3470-3478.	3.7	6
207	Recent Advances in Phase-transfer Catalysis. , 0, , 206-257.		5
208	Biodiesel production by integrated reactive-separation design. Computer Aided Chemical Engineering, 2007, 24, 1283-1288.	0.5	5
209	Biodiesel production by heat-integrated reactive distillation. Computer Aided Chemical Engineering, 2008, , 775-780.	0.5	5
210	A Simple and Efficient Device and Method for Measuring the Kinetics of Gasâ€Producing Reactions. Angewandte Chemie, 2019, 131, 17433-17436.	2.0	5
211	Application of pertubation theory to free-radical benzylic and allylic oxidation of unconjugated ï€-systems. Tetrahedron, 1999, 55, 561-568.	1.9	4
212	Applying Topological and Economical Principles in Catalyst Design: New Aluminaâ€"Cobalt Coreâ€"Shell Catalysts. Topics in Catalysis, 2014, 57, 1419-1424.	2.8	4
213	Novel synthesis of alkali and quaternary onium hydroxides via liquid anion exchange; an alternative concept for the manufacture of KOH and other hydroxide salts. Chemical Communications, 2000, , 1293-1294.	4.1	3
214	Bio-based materials: general discussion. Faraday Discussions, 2017, 202, 121-139.	3.2	3
215	Retention of organics and degradation of micropollutants in municipal wastewater using impregnated ceramics. Clean Technologies and Environmental Policy, 2020, 22, 689-700.	4.1	3
216	Feedstocks and analysis: general discussion. Faraday Discussions, 2017, 202, 497-519.	3.2	2

#	Article	IF	Citations
217	Covalent structured catalytic materials containing single-atom metal sites with controllable spatial and chemical properties: concept and application. Catalysis Science and Technology, 2020, 10, 6694-6700.	4.1	2
218	Palladium-catalysed oxidation of alcohols to carbonyl compounds with 1,2-dichloroethane as the primary oxidant: a theoretical studyElectronic supplementary information (ESI) available: Tables of absolute energies and structural parameters for all of the computed species. See http://www.rsc.org/suppdata/p2/b1/b102256n/. Perkin Transactions II RSC, 2001, , 1998-2004.	1.1	1
219	One-Way Extraction of a Chemical Potential through a Liquid Membrane:Â Concept Demonstration and Applications. Industrial & Engineering Chemistry Research, 2001, 40, 6045-6050.	3.7	1
220	Linking experiments to modeling in biodiesel production. Computer Aided Chemical Engineering, 2006, , 731-736.	0.5	1
221	Back Cover: Mesoporous Silica with Siteâ€Isolated Amine and Phosphotungstic Acid Groups: A Solid Catalyst with Tunable Antagonistic Functions for Oneâ€Pot Tandem Reactions (Angew. Chem. Int. Ed.) Tj ETQq1 1 0.784314 rgBT /Over	13.8	1
222	Titelbild: De Novo Design of Nanostructured Iron-Cobalt Fischer-Tropsch Catalysts (Angew. Chem.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.0	1
223	Air Oxidation of Benzene to Biphenyl â€“ A Dual Catalytic Approach. Advanced Synthesis and Catalysis, 2001, 343, 455-459.	4.3	1
224	Sustainable Biodiesel Production by Catalytic Reactive Distillation. Chemical Industries, 2008, , 291-301.	0.1	1
225	Recent Advances in Phase-Transfer Catalysis. ChemInform, 2003, 34, no.	0.0	0
226	Solvent-Free Synthesis of Rechargeable Solid Oxygen Reservoirs for Clean Hydrogen Oxidation.. ChemInform, 2003, 34, no.	0.0	0
227	Development of New Systems of Nano-Disperse Pt-(2%Pt-Ce0.9W0.1O2)/C Electrocatalysts Tolerant to Carbon Monoxide (CO) for PEMFC Anodes. ECS Transactions, 2012, 43, 185-189.	0.5	0
228	Bio-based chemicals: general discussion. Faraday Discussions, 2017, 202, 227-245.	3.2	0
229	Conversion technologies: general discussion. Faraday Discussions, 2017, 202, 371-389.	3.2	0