Thomas E Davies

List of Publications by Year
in descending order

95 papers	3,790 citations	94269 37 h-index	143772 57 g-index
97 all docs	97 docs citations	97 times ranked	4444 citing authors

#	Article	IF	Citations
1	The Direct Synthesis of Hydrogen Peroxide over AuPd Nanoparticles: An Investigation into Metal Loading. Catalysis Letters, 2022, 152, 254-262.	1.4	15
2	Au-ZSM-5 catalyses the selective oxidation of CH4 to CH3OH and CH3COOH using O2. Nature Catalysis, 2022, 5, 45-54.	16.1	95
3	Auâ€“Pd separation enhances bimetallic catalysis of alcohol oxidation. Nature, 2022, 603, 271-275.	13.7	114
4	Enhancing catalytic performance of AuPd catalysts towards the direct synthesis of H₂O₂ through incorporation of base metals. Catalysis Science and Technology, 2022, 12, 1986-1995.	2.1	13
5	The oxidative degradation of phenol via in situ H₂O₂ synthesis using Pd supported Fe-modified ZSM-5 catalysts. Catalysis Science and Technology, 2022, 12, 2943-2953.	2.1	7
6	Experimental methods in chemical engineering: Scanning electron microscopy and<scp>X</scp>â€ray ultraâ€microscopyâ€”<scp>SEM</scp>and<scp>XuM</scp>. Canadian Journal of Chemical Engineering, 2022, 100, 3145-3159.	0.9	4
7	The Critical Role of Î²PdZn Alloy in Pd/ZnO Catalysts for the Hydrogenation of Carbon Dioxide to Methanol. ACS Catalysis, 2022, 12, 5371-5379.	5.5	23
8	Highly efficient catalytic production of oximes from ketones using in situâ€“generated H ₂ O ₂. Science, 2022, 376, 615-620.	6.0	63
9	The Influence of Reaction Conditions on the Oxidation of Cyclohexane via the In-Situ Production of H2O2. Catalysis Letters, 2021, 151, 164-171.	1.4	16
10	Controlling product selectivity with nanoparticle composition in tandem chemo-biocatalytic styrene oxidation. Green Chemistry, 2021, 23, 4170-4180.	4.6	3
11	Revealing the electronic structure, heterojunction band offset and alignment of Cu2ZnGeSe4: a combined experimental and computational study towards photovoltaic applications. Physical Chemistry Chemical Physics, 2021, 23, 9553-9560.	1.3	6
12	Ambient base-free glycerol oxidation over bimetallic PdFe/SiO2 by in situ generated active oxygen species. Research on Chemical Intermediates, 2021, 47, 303-324.	1.3	6
13	The Selective Oxidation of Cyclohexane via In-situ H2O2 Production Over Supported Pd-based Catalysts. Catalysis Letters, 2021, 151, 2762-2774.	1.4	14
14	Sulfur Promotion in Au/C Catalyzed Acetylene Hydrochlorination. Small, 2021, 17, 2007221.	5.2	16
15	Enhanced Selective Oxidation of Benzyl Alcohol via In Situ H₂O₂ Production over Supported Pd-Based Catalysts. ACS Catalysis, 2021, 11, 2701-2714.	5.5	86
16	Gas Phase Glycerol Valorization over Ceria Nanostructures with Well-Defined Morphologies. ACS Catalysis, 2021, 11, 4893-4907.	5.5	13
17	Combination of Cu/ZnO Methanol Synthesis Catalysts and ZSM-5 Zeolites to Produce Oxygenates from CO2 and H2. Topics in Catalysis, 2021, 64, 965-973.	1.3	6
18	Evaluating the Activity and Stability of Perovskite LaMO3-Based Pt Catalysts in the Aqueous Phase Reforming of Glycerol. Topics in Catalysis, 2021, 64, 992-1009.	1.3	8

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19	A residue-free approach to water disinfection using catalytic in situ generation of reactive oxygen species. Nature Catalysis, 2021, 4, 575-585.	16.1	73
20	Conversion of levulinic acid to levulinate ester biofuels by heterogeneous catalysts in the presence of acetals and ketals. Applied Catalysis B: Environmental, 2021, 293, 120219.	10.8	30
21	Improving the performance of Pd based catalysts for the direct synthesis of hydrogen peroxide via acid incorporation during catalyst synthesis. Catalysis Communications, 2021, 161, 106358.	1.6	6
22	The Influence of Precursor on the Preparation of CeO2 Catalysts for the Total Oxidation of the Volatile Organic Compound Propane. Catalysts, 2021, 11, 1461.	1.6	5
23	The degradation of phenol via in situ H₂O₂ production over supported Pd-based catalysts. Catalysis Science and Technology, 2021, 11, 7866-7874.	2.1	5
24	Uncovering the origin of enhanced field emission properties of rGOâ€“MnO₂heterostructures: a synergistic experimental and computational investigation. RSC Advances, 2020, 10, 25988-25998.	1.7	9
25	The direct synthesis of hydrogen peroxide using a combination of a hydrophobic solvent and water. Catalysis Science and Technology, 2020, 10, 8203-8212.	2.1	6
26	Influence of the Preparation Method of Ag-K/CeO2-ZrO2-Al2O3 Catalysts on Their Structure and Activity for the Simultaneous Removal of Soot and NOx. Catalysts, 2020, 10, 294.	1.6	9
27	Probing composition distributions in nanoalloy catalysts with correlative electron microscopy. Journal of Materials Chemistry A, 2020, 8, 15725-15733.	5.2	4
28	Enhanced catalyst selectivity in the direct synthesis of H₂O₂ through Pt incorporation into TiO₂ supported AuPd catalysts. Catalysis Science and Technology, 2020, 10, 4635-4644.	2.1	29
29	Improved volatile cargo retention and mechanical properties of capsules via sediment-free in situ polymerization with cross-linked poly(vinyl alcohol) as an emulsifier. Journal of Colloid and Interface Science, 2020, 568, 155-164.	5.0	11
30	Facile synthesis of precious-metal single-site catalysts using organic solvents. Nature Chemistry, 2020, 12, 560-567.	6.6	96
31	Enhanced visible-light-driven photocatalytic H₂ production and Cr(<scp>vi</scp>) reduction of a ZnIn₂S₄/MoS₂ heterojunction synthesized by the biomolecule-assisted microwave heating method. Catalysis Science and Technology, 2020, 10, 2838-2854.	2.1	46
32	Lowering the Operating Temperature of Perovskite Catalysts for N₂O Decomposition through Control of Preparation Methods. ACS Catalysis, 2020, 10, 5430-5442.	5.5	31
33	Liquid phase hydrogenation of CO₂ to formate using palladium and ruthenium nanoparticles supported on molybdenum carbide. New Journal of Chemistry, 2019, 43, 13985-13997.	1.4	18
34	Microwave synthesis of ZnIn₂S₄/WS₂ composites for photocatalytic hydrogen production and hexavalent chromium reduction. Catalysis Science and Technology, 2019, 9, 5698-5711.	2.1	52
35	Metal Triflate-Promoted Allylic Substitution Reactions of Cinnamyl Alcohol in the Presence of Orthoesters and Acetals. ACS Omega, 2019, 4, 15985-15991.	1.6	2
36	The hydrogenation of levulinic acid to Î³-valerolactone over Cuâ€“ZrO2 catalysts prepared by a pH-gradient methodology. Journal of Energy Chemistry, 2019, 36, 15-24.	7.1	30

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37	Ceriaâ€“Zirconia Mixed Metal Oxides Prepared via Mechanochemical Grinding of Carbonates for the Total Oxidation of Propane and Naphthalene. Catalysts, 2019, 9, 475.	1.6	45
38	Mechanochemical preparation of ceria-zirconia catalysts for the total oxidation of propane and naphthalene Volatile Organic Compounds. Applied Catalysis B: Environmental, 2019, 253, 331-340.	10.8	44
39	Synthesis of highly uniform and composition-controlled goldâ€“palladium supported nanoparticles in continuous flow. Nanoscale, 2019, 11, 8247-8259.	2.8	35
40	The Key Role of Nanocasting in Goldâ€based Fe₂O₃ Nanocasted Catalysts for Oxygen Activation at the Metalâ€support Interface. ChemCatChem, 2019, 11, 1915-1927.	1.8	13
41	Crystalline phases involved in the hydration of calcium silicateâ€based cements: Semiâ€quantitative Rietveld Xâ€ray diffraction analysis. Australian Endodontic Journal, 2019, 45, 26-32.	0.6	15
42	Homocoupling of Phenylboronic Acid using Atomically Dispersed Gold on Carbon Catalysts: Catalyst Evolution Before Reaction. ChemCatChem, 2018, 10, 1853-1859.	1.8	15
43	Etherification Reactions of Furfuryl Alcohol in the Presence of Orthoesters and Ketals: Application to the Synthesis of Furfuryl Ether Biofuels. ACS Sustainable Chemistry and Engineering, 2018, 6, 4996-5002.	3.2	38
44	Renewable fuel production from hydropyrolysis of residual biomass using molybdenum carbide-based catalysts: An analytical Py-GC/MS investigation. Catalysis Today, 2018, 302, 161-168.	2.2	23
45	Nanoporous Aluminosilicate-Catalyzed Telescoped Acetalization-Direct Aldol Reactions of Acetals with 1,3-Dicarbonyl Compounds. ACS Omega, 2018, 3, 15482-15491.	1.6	11
46	Hydrogen production from formic acid decomposition in the liquid phase using Pd nanoparticles supported on CNFs with different surface properties. Sustainable Energy and Fuels, 2018, 2, 2705-2716.	2.5	37
47	Controlling the Incorporation of Phosphorus Functionalities on Carbon Nanofibers: Effects on the Catalytic Performance of Fructose Dehydration. Journal of Carbon Research, 2018, 4, 9.	1.4	13
48	Catalytic Performances of Auâ€“Pt Nanoparticles on Phosphorous Functionalized Carbon Nanofibers towards HMF Oxidation. Journal of Carbon Research, 2018, 4, 48.	1.4	8
49	Visible light selective photocatalytic conversion of glucose by TiO2. Applied Catalysis B: Environmental, 2017, 202, 281-288.	10.8	93
50	Electron Microscopy Investigations of Precious Metal Catalysts: Towards Controlled Synthesis of Ultra-Small Nanoparticles. Microscopy and Microanalysis, 2017, 23, 1854-1855.	0.2	0
51	Fischer Tropsch Synthesis using promoted cobalt-based catalysts. Catalysis Today, 2016, 272, 74-79.	2.2	15
52	Visibleâ€Lightâ€Controlled Oxidation of Glucose using Titaniaâ€Supported Silver Photocatalysts. ChemCatChem, 2016, 8, 3475-3483.	1.8	40
53	Synthesis and kinetic modeling of biomassâ€derived renewable polyesters. Journal of Polymer Science Part A, 2016, 54, 2876-2887.	2.5	27
54	Synthesis and hydrodeoxygenation activity of Ni2P/C â€“ Effect of the palladium salt on lowering the nickel phosphide synthesis temperature. Journal of Catalysis, 2016, 340, 154-165.	3.1	42

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55	Stable amorphous georgeite as a precursor to a high-activity catalyst. Nature, 2016, 531, 83-87.	13.7	128
56	Fischer Tropsch synthesis using cobalt based carbon catalysts. Catalysis Today, 2016, 275, 35-39.	2.2	29
57	Dehydrative Etherification Reactions of Glycerol with Alcohols Catalyzed by Recyclable Nanoporous Aluminosilicates: Telescoped Routes to Glyceryl Ethers. ACS Sustainable Chemistry and Engineering, 2016, 4, 835-843.	3.2	17
58	Nanoporous alumino- and borosilicate-mediated Meinwald rearrangement of epoxides. Applied Catalysis A: General, 2015, 493, 17-24.	2.2	19
59	Mechanochemical synthesis of copper manganese oxide for the ambient temperature oxidation of carbon monoxide. Applied Catalysis B: Environmental, 2015, 165, 222-231.	10.8	53
60	Base-free glucose oxidation using air with supported gold catalysts. Green Chemistry, 2014, 16, 3132-3141.	4.6	71
61	Novel cobalt zinc oxide Fischerâ€“Tropsch catalysts synthesised using supercritical anti-solvent precipitation. Catalysis Science and Technology, 2014, 4, 1970-1978.	2.1	29
62	Conversion of furfuryl alcohol into 2-methylfuran at room temperature using Pd/TiO₂ catalyst. Catalysis Science and Technology, 2014, 4, 2280-2286.	2.1	58
63	Initiator-free hydrocarbon oxidation using supported gold nanoparticles. Catalysis Science and Technology, 2014, 4, 908-911.	2.1	24
64	Solvent-free aerobic oxidation of alcohols using supported gold palladium nanoalloys prepared by a modified impregnation method. Catalysis Science and Technology, 2014, 4, 3120-3128.	2.1	36
65	Nanoporous Aluminosilicate-Mediated Synthesis of Ethers by a Dehydrative Etherification Approach. ACS Sustainable Chemistry and Engineering, 2014, 2, 860-866.	3.2	12
66	Baseâ€Free Oxidation of Glycerol Using Titaniaâ€Supported Trimetallic Auâ€“Pdâ€“Pt Nanoparticles. ChemSusChem, 2014, 7, 1326-1334.	3.6	73
67	Molybdenum carbide nanoparticles within carbon nanotubes as superior catalysts for Î³-valerolactone production via levulinic acid hydrogenation. Green Chemistry, 2014, 16, 4092-4097.	4.6	101
68	Effect of bismuth oxide on white mineral trioxide aggregate: chemical characterization and physical properties. International Endodontic Journal, 2014, 47, 520-533.	2.3	46
69	Green preparation of transition metal oxide catalysts using supercritical CO2 anti-solvent precipitation for the total oxidation of propane. Applied Catalysis B: Environmental, 2013, 140-141, 671-679.	10.8	50
70	Selective catalytic oxidation using supported goldâ€“platinum and palladiumâ€“platinum nanoalloys prepared by sol-immobilisation. Physical Chemistry Chemical Physics, 2013, 15, 10636.	1.3	37
71	Aqua regia activated Au/C catalysts for the hydrochlorination of acetylene. Journal of Catalysis, 2013, 297, 128-136.	3.1	139
72	Modifications of the metal and support during the deactivation and regeneration of Au/C catalysts for the hydrochlorination of acetylene. Catalysis Science and Technology, 2013, 3, 128-134.	2.1	95

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73	Preparation of Fischerâ€“Tropsch Supported Cobalt Catalysts Using a New Gas Anti-Solvent Process. ACS Catalysis, 2013, 3, 764-772.	5.5	18
74	Nanoporous aluminosilicate mediated transacetalization reactions: application in glycerol valorization. Catalysis Science and Technology, 2012, 2, 2258.	2.1	14
75	Physical mixing of metal acetates: a simple, scalable method to produce active chloride free bimetallic catalysts. Chemical Science, 2012, 3, 2965.	3.7	38
76	Bioactivity of EndoSequence Root Repair Material and Bioaggregate. International Endodontic Journal, 2012, 45, 1127-1134.	2.3	104
77	Enhanced selectivity to propene in the methanol to hydrocarbons reaction by use of ZSM-5/11 intergrowth zeolite. Microporous and Mesoporous Materials, 2012, 164, 207-213.	2.2	57
78	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.	3.1	106
79	Synthesis of high surface area CuMn2O4 by supercritical anti-solvent precipitation for the oxidation of CO at ambient temperature. Catalysis Science and Technology, 2011, 1, 740.	2.1	50
80	Microstructure and chemical analysis of blood-contaminated mineral trioxide aggregate. International Endodontic Journal, 2011, 44, 1011-1018.	2.3	58
81	The effect of heat treatment on phase formation of copper manganese oxide: Influence on catalytic activity for ambient temperature carbon monoxide oxidation. Journal of Catalysis, 2011, 281, 279-289.	3.1	58
82	Promoting the activity and selectivity of high surface area Niâ€“Ceâ€“O mixed oxides by gold deposition for VOC catalytic combustion. Chemical Engineering Journal, 2011, 175, 271-278.	6.6	64
83	Nanoporous aluminosilicate catalyzed Friedelâ€“Crafts alkylation reactions of indoles with aldehydes and acetals. Green Chemistry, 2011, 13, 2320.	4.6	49
84	The Influence of Platinum Addition on Nano-Crystalline Ceria Catalysts for the Total Oxidation of Naphthalene a Model Polycyclic Aromatic Hydrocarbon. Catalysis Letters, 2011, 141, 1732-1738.	1.4	14
85	Deep oxidation of pollutants using gold deposited on a high surface area cobalt oxide prepared by a nanocasting route. Journal of Hazardous Materials, 2011, 187, 544-552.	6.5	80
86	Synthesis of nanoporous aluminosilicate materials and their application as highly selective heterogeneous catalysts for the synthesis of Î²-amino alcohols. Journal of Molecular Catalysis A, 2010, 329, 57-63.	4.8	37
87	The Oxidative Dehydrogenation of Propane Using Vanadium Oxide Supported on Nanocrystalline Ceria. Topics in Catalysis, 2009, 52, 1660-1668.	1.3	25
88	New Nanocrystalline Cu/MnO_x Catalysts Prepared from Supercritical Antisolvent Precipitation. ChemCatChem, 2009, 1, 247-251.	1.8	44
89	Ceria prepared using supercritical antisolvent precipitation: a green support for goldâ€“palladium nanoparticles for the selective catalytic oxidation of alcohols. Journal of Materials Chemistry, 2009, 19, 8619.	6.7	88
90	Total oxidation of propane using nanocrystalline cobalt oxide and supported cobalt oxide catalysts. Applied Catalysis B: Environmental, 2008, 84, 176-184.	10.8	221

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91	Selective formation of chloroethane by the hydrochlorination of ethene using zinc catalysts. Journal of Catalysis, 2007, 252, 23-29.	3.1	13
92	Complete oxidation of short chain alkanes using a nanocrystalline cobalt oxide catalyst. Catalysis Letters, 2007, 116, 116-121.	1.4	55
93	Nanocrystalline cobalt oxide: a catalyst for selective alkane oxidation under ambient conditions. Chemical Communications, 2006, , 3417-3419.	2.2	68
94	The Oxidative Dehydrogenation of Propane Using Galliumâ€“Molybdenum Based Catalysts. Catalysis Letters, 2004, 93, 151-154.	1.4	10
95	The oxidative dehydrogenation of propane using galliumâ€“molybdenum oxide-based catalysts. Journal of Molecular Catalysis A, 2004, 220, 77-84.	4.8	18