Jennifer K Edwards

List of Publications by Year
in descending order

73 papers	7,662 citations	81900 39 h-index	82547 72 g-index
76 all docs	76 docs citations	76 times ranked	6787 citing authors

#	Article	IF	Citations
1	Solvent-Free Oxidation of Primary Alcohols to Aldehydes Using Au-Pd/TiO2 Catalysts. Science, 2006, 311, 362-365.	12.6	1,976
2	Switching Off Hydrogen Peroxide Hydrogenation in the Direct Synthesis Process. Science, 2009, 323, 1037-1041.	12.6	759
3	Palladium-tin catalysts for the direct synthesis of H ₂ O ₂ with high selectivity. Science, 2016, 351, 965-968.	12.6	465
4	Palladium and Goldâ€"Palladium Catalysts for the Direct Synthesis of Hydrogen Peroxide. Angewandte Chemie - International Edition, 2008, 47, 9192-9198.	13.8	316
5	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
6	Direct synthesis of hydrogen peroxide from H₂and O₂using supported Auâ€"Pd catalysts. Faraday Discussions, 2008, 138, 225-239.	3.2	207
7	Direct Synthesis of Hydrogen Peroxide and Benzyl Alcohol Oxidation Using Auâ^'Pd Catalysts Prepared by Sol Immobilization. Langmuir, 2010, 26, 16568-16577.	3.5	201
8	Advances in the direct synthesis of hydrogen peroxide from hydrogen and oxygen. Catalysis Today, 2015, 248, 3-9.	4.4	189
9	Direct Synthesis of Hydrogen Peroxide from H2and O2Using Al2O3Supported Auâ^'Pd Catalysts. Chemistry of Materials, 2006, 18, 2689-2695.	6.7	183
10	Direct synthesis of hydrogen peroxide from H2 and O2 using Auâ€"Pd/Fe2O3 catalysts. Journal of Materials Chemistry, 2005, 15, 4595.	6.7	180
11	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
12	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
13	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
14	Synthesis of Stable Ligand-free Goldâ€"Palladium Nanoparticles Using a Simple Excess Anion Method. ACS Nano, 2012, 6, 6600-6613.	14.6	128
15	Energy dispersive X-ray spectroscopy of bimetallic nanoparticles in an aberration corrected scanning transmission electron microscope. Faraday Discussions, 2008, 138, 337-351.	3.2	109
16	The Direct Synthesis of Hydrogen Peroxide Using Platinumâ€Promoted Goldâ€"Palladium Catalysts. Angewandte Chemie - International Edition, 2014, 53, 2381-2384.	13.8	104
17	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
18	Solvent-free oxidation of benzyl alcohol with oxygen using zeolite-supported Au and Auâ€"Pd catalysts. Catalysis Letters, 2006, 110, 7-13.	2.6	98

#	Article	IF	Citations
19	The effect of heat treatment on the performance and structure of carbon-supported Auâ€“Pd catalysts for the direct synthesis of hydrogen peroxide. Journal of Catalysis, 2012, 292, 227-238.	6.2	94
20	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
21	The role of the support in achieving high selectivity in the direct formation of hydrogen peroxide. Green Chemistry, 2008, 10, 1162.	9.0	89
22	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
23	New approaches to designing selective oxidation catalysts: Au/C a versatile catalyst. Topics in Catalysis, 2006, 38, 223-230.	2.8	83
24	Oxidation of benzyl alcohol using supported goldâ€“palladium nanoparticles. Catalysis Today, 2011, 163, 47-54.	4.4	73
25	A residue-free approach to water disinfection using catalytic in situ generation of reactive oxygen species. Nature Catalysis, 2021, 4, 575-585.	34.4	73
26	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
27	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
28	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
29	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
30	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
31	Highly efficient catalytic production of oximes from ketones using in situâ€“generated H ₂ O ₂. Science, 2022, 376, 615-620.	12.6	63
32	Reactivity studies of Auâ€“Pd supported nanoparticles for catalytic applications. Applied Catalysis A: General, 2011, 391, 400-406.	4.3	62
33	Direct synthesis of hydrogen peroxide using Auâ€“Pd-exchanged and supported heteropolyacid catalysts at ambient temperature using water as solvent. Green Chemistry, 2012, 14, 170-181.	9.0	62
34	Population and hierarchy of active species in gold iron oxide catalysts for carbon monoxide oxidation. Nature Communications, 2016, 7, 12905.	12.8	62
35	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
36	Base-free oxidation of glucose to gluconic acid using supported gold catalysts. Catalysis Science and Technology, 2016, 6, 107-117.	4.1	53

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37	Effect of acid pre-treatment on AuPd/SiO₂catalysts for the direct synthesis of hydrogen peroxide. Catalysis Science and Technology, 2013, 3, 812-818.	4.1	45
38	Surface functionalized TiO2 supported Pd catalysts for solvent-free selective oxidation of benzyl alcohol. Catalysis Today, 2015, 250, 218-225.	4.4	45
39	The Direct Synthesis of H₂O₂ Using TSâ€1 Supported Catalysts. ChemCatChem, 2019, 11, 1673-1680.	3.7	42
40	Selective oxidation of benzyl alcohol using in situ generated H2O2 over hierarchical Auâ€“Pd titanium silicalite catalysts. Catalysis Science and Technology, 2013, 3, 2425.	4.1	39
41	Physical mixing of metal acetates: a simple, scalable method to produce active chloride free bimetallic catalysts. Chemical Science, 2012, 3, 2965.	7.4	38
42	Application of Gold Nanoparticles in Catalysis. Frontiers of Nanoscience, 2012, , 249-293.	0.6	36
43	Direct synthesis of hydrogen peroxide using Auâ€“Pd supported and ion-exchanged heteropolyacids precipitated with various metal ions. Catalysis Today, 2015, 248, 10-17.	4.4	36
44	Understanding the effect of thermal treatments on the structure of CuAu/SiO2 catalysts and their performance in propene oxidation. Catalysis Science and Technology, 2011, 1, 76.	4.1	31
45	Supercritical antisolvent precipitation of TiO2 with tailored anatase/rutile composition for applications in redox catalysis and photocatalysis. Applied Catalysis A: General, 2015, 504, 62-73.	4.3	29
46	Solid Acid Additives as Recoverable Promoters for the Direct Synthesis of Hydrogen Peroxide. Industrial & Engineering Chemistry Research, 2017, 56, 13287-13293.	3.7	26
47	Influence of reaction conditions on the direct synthesis of hydrogen peroxide over AuPd/carbon catalysts. Catalysis Science and Technology, 2012, 2, 1908.	4.1	23
48	The direct synthesis of hydrogen peroxide using platinum promoted goldâ€“palladium catalysts. Catalysis Science and Technology, 2014, 4, 3244-3250.	4.1	23
49	Nanocrystalline gold and goldâ€“palladium as effective catalysts for selective oxidation. Journal of Materials Research, 2007, 22, 831-837.	2.6	22
50	Oxidation of Benzyl Alcohol using in Situ Generated Hydrogen Peroxide. Organic Process Research and Development, 2014, 18, 1455-1460.	2.7	21
51	The Effects of Dopants on the Cuâ€“ZrO₂ Catalyzed Hydrogenation of Levulinic Acid. Journal of Physical Chemistry C, 2019, 123, 7879-7888.	3.1	21
52	Depressing the hydrogenation and decomposition reaction in H₂O₂ synthesis by supporting AuPd on oxygen functionalized carbon nanofibers. Catalysis Science and Technology, 2016, 6, 694-697.	4.1	20
53	Direct Synthesis of Hydrogen Peroxide Using Cs-Containing Heteropolyacid-Supported Palladiumâ€“Copper Catalysts. Catalysis Letters, 2019, 149, 998-1006.	2.6	19
54	Direct synthesis of hydrogen peroxide using ceria-supported gold and palladium catalysts. Catalysis Today, 2011, 178, 47-50.	4.4	18

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55	Silverâ€“palladium catalysts for the direct synthesis of hydrogen peroxide. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170058.	3.4	18
56	The direct synthesis of hydrogen peroxide from H ₂ and O ₂ using Pdâ€“Ni/TiO ₂ catalysts. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20200062.	3.4	18
57	Gas phase stabiliser-free production of hydrogen peroxide using supported goldâ€“palladium catalysts. Chemical Science, 2016, 7, 5833-5837.	7.4	16
58	The Influence of Reaction Conditions on the Oxidation of Cyclohexane via the In-Situ Production of H2O2. Catalysis Letters, 2021, 151, 164-171.	2.6	16
59	The Selective Oxidation of Cyclohexane via In-situ H2O2 Production Over Supported Pd-based Catalysts. Catalysis Letters, 2021, 151, 2762-2774.	2.6	14
60	One pot microwave synthesis of highly stable AuPd@Pd supported coreâ€“shell nanoparticles. Faraday Discussions, 2018, 208, 409-425.	3.2	13
61	Physical mixing of metal acetates: optimisation of catalyst parameters to produce highly active bimetallic catalysts. Catalysis Science and Technology, 2013, 3, 2910.	4.1	10
62	Bicatalytic Multistep Reactions Enâ€…Route to the Oneâ€Pot Total Synthesis of Complex Molecules: Easy Access to Chromene and 1,2â€Dihydroquinoline Derivatives from Simple Substrates. ChemCatChem, 2017, 9, 70-75.	3.7	10
63	Multifunctional supported bimetallic catalysts for a cascade reaction with hydrogen auto transfer: synthesis of 4-phenylbutan-2-ones from 4-methoxybenzyl alcohols. Catalysis Science and Technology, 2017, 7, 1928-1936.	4.1	9
64	Platinum Nanoparticle Inclusion into a Carbonized Polymer of Intrinsic Microporosity: Electrochemical Characteristics of a Catalyst for Electroless Hydrogen Peroxide Production. Nanomaterials, 2018, 8, 542.	4.1	8
65	Gold catalysis: helping create a sustainable future. Applied Petrochemical Research, 2012, 2, 7-14.	1.3	7
66	The direct synthesis of hydrogen peroxide using a combination of a hydrophobic solvent and water. Catalysis Science and Technology, 2020, 10, 8203-8212.	4.1	6
67	Ambient base-free glycerol oxidation over bimetallic PdFe/SiO2 by in situ generated active oxygen species. Research on Chemical Intermediates, 2021, 47, 303-324.	2.7	6
68	Impact of the Experimental Parameters on Catalytic Activity When Preparing Polymer Protected Bimetallic Nanoparticle Catalysts on Activated Carbon. ACS Catalysis, 2022, 12, 4440-4454.	11.2	6
69	Gold as a Catalyst for the Ring Opening of 2,5-Dimethylfuran. Catalysis Letters, 2018, 148, 2109-2116.	2.6	3
70	The effect of ring size on the selective carboxylation of cycloalkene oxides. Catalysis Science and Technology, 2017, 7, 1433-1439.	4.1	2
71	A Career in Catalysis: Graham J. Hutchings. ACS Catalysis, 2021, 11, 5916-5933.	11.2	2
72	Nanocrystalline gold and gold-palladium as effective catalysts for selective oxidation. Materials Research Society Symposia Proceedings, 2005, 900, 1.	0.1	0

#	Article	IF	Citations
73	The Over-Riding Role of Autocatalysis in Allylic Oxidation. Catalysis Letters, 0, , 1.	2.6	0