James A Anderson

List of Publications by Year
in descending order

66 papers	3,571 citations	126858 33 h-index	133188 59 g-index
70 all docs	70 docs citations	70 times ranked	5217 citing authors

#	Article	IF	Citations
1	Cofactor NAD(P)H Regeneration Inspired by Heterogeneous Pathways. CheM, 2017, 2, 621-654.	5.8	287
2	Recent advances in selective acetylene hydrogenation using palladium containing catalysts. Frontiers of Chemical Science and Engineering, 2015, 9, 142-153.	2.3	199
3	Photocatalytic nitrate reduction over metal modified TiO2. Applied Catalysis B: Environmental, 2009, 85, 192-200.	10.8	181
4	Cu/Al 2 O 3 catalysts modified with Pd for selective acetylene hydrogenation. Journal of Catalysis, 2014, 319, 127-135.	3.1	163
5	Molecular Interactions of a Cu-Based Metalâ€“Organic Framework with a Confined Imidazolium-Based Ionic Liquid: A Combined Density Functional Theory and Experimental Vibrational Spectroscopy Study. Journal of Physical Chemistry C, 2016, 120, 3295-3304.	1.5	155
6	Cathode materials for rechargeable aluminum batteries: current status and progress. Journal of Materials Chemistry A, 2017, 5, 5646-5660.	5.2	147
7	Low Salinity Waterflooding in Carbonate Reservoirs: Review of Interfacial Mechanisms. Colloids and Interfaces, 2018, 2, 20.	0.9	139
8	Biomass-derived nanostructured porous carbons for lithium-sulfur batteries. Science China Materials, 2016, 59, 389-407.	3.5	110
9	Molecular-Level Insight into Selective Catalytic Reduction of NO_x with NH₃ to N₂ over a Highly Efficient Bifunctional V_a-MnO_x Catalyst at Low Temperature. ACS Catalysis, 2018, 8, 4937-4949.	5.5	103
10	Ecohydrological separation in wet, low energy northern environments? A preliminary assessment using different soil water extraction techniques. Hydrological Processes, 2015, 29, 5139-5152.	1.1	100
11	Simultaneous photocatalytic removal of nitrate and oxalic acid over Cu2O/TiO2 and Cu2O/TiO2-AC composites. Applied Catalysis B: Environmental, 2017, 217, 181-191.	10.8	97
12	FTIR study of aqueous nitrate reduction over Pd/TiO2. Applied Catalysis B: Environmental, 2008, 77, 409-417.	10.8	95
13	Sulfur as a catalyst promoter or selectivity modifier in heterogeneous catalysis. Catalysis Science and Technology, 2014, 4, 272-294.	2.1	93
14	Carbon Capture by Metal Oxides: Unleashing the Potential of the (111) Facet. Journal of the American Chemical Society, 2018, 140, 4736-4742.	6.6	83
15	Optimisation of preparation method for Pd doped Cu/Al₂O₃ catalysts for selective acetylene hydrogenation. Catalysis Science and Technology, 2015, 5, 2880-2890.	2.1	80
16	Nonâ€Thermal Plasma Activation of Goldâ€Based Catalysts for Lowâ€Temperature Waterâ€“Gas Shift Catalysis. Angewandte Chemie - International Edition, 2017, 56, 5579-5583.	7.2	77
17	Multiple strategies to decrease ignition temperature for soot combustion on ultrathin MnO2-nanosheet array. Applied Catalysis B: Environmental, 2019, 246, 312-321.	10.8	77
18	Can TiO2 promote the reduction of nitrates in water?. Journal of Catalysis, 2005, 234, 282-291.	3.1	76

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19	Triphenylphosphine: a ligand for heterogeneous catalysis too? Selectivity enhancement in acetylene hydrogenation over modified Pd/TiO₂ catalyst. Catalysis Science and Technology, 2015, 5, 2449-2459.	2.1	72
20	The potential of microbial processes for lignocellulosic biomass conversion to ethanol: a review. Journal of Chemical Technology and Biotechnology, 2015, 90, 366-383.	1.6	72
21	Electrocatalysis on Separator Modified by Molybdenum Trioxide Nanobelts for Lithiumâ€“Sulfur Batteries. Advanced Materials Interfaces, 2018, 5, 1800243.	1.9	66
22	Influence of Water on the Chemistry and Structure of the Metalâ€“Organic Framework Cu₃(btc)₂. Journal of Physical Chemistry C, 2016, 120, 17323-17333.	1.5	64
23	Photocatalytic nitrate reduction over Au/TiO2. Catalysis Today, 2011, 175, 316-321.	2.2	62
24	Aqueous phase photocatalytic nitrate destruction using titania based materials: routes to enhanced performance and prospects for visible light activation. Catalysis Science and Technology, 2013, 3, 879.	2.1	58
25	Mechanisms of Surface Charge Modification of Carbonates in Aqueous Electrolyte Solutions. Colloids and Interfaces, 2019, 3, 62.	0.9	57
26	Photoformed electron transfer from TiO2 to metal clusters. Catalysis Communications, 2008, 9, 1991-1995.	1.6	56
27	Selective hydrogenation of mixed alkyne/alkene streams at elevated pressure over a palladium sulfide catalyst. Journal of Catalysis, 2017, 355, 40-52.	3.1	56
28	Simultaneous photocatalytic degradation of nitrate and oxalic acid over gold promoted titania. Catalysis Today, 2012, 181, 171-176.	2.2	52
29	Water Denitration over a Pdâ€“Sn/Al2O3 Catalyst. Catalysis Letters, 2005, 105, 209-217.	1.4	49
30	Active Site Identification and Modification of Electronic States by Atomic-Scale Doping To Enhance Oxide Catalyst Innovation. ACS Catalysis, 2018, 8, 1399-1404.	5.5	42
31	Imaging of low temperature induced SMSI on Pd/TiO2 catalysts. Catalysis Letters, 2007, 114, 91-95.	1.4	41
32	The Variable Influence of Dispersant on Degradation of Oil Hydrocarbons in Subarctic Deep-Sea Sediments at Low Temperatures (0â€“5â€‰Â°C). Scientific Reports, 2017, 7, 2253.	1.6	40
33	Infrared study of the adsorption of acetone, acrolein, ethanoic acid and propeneâ€“NO mixtures on Rh/Al2O3 catalysts. Journal of the Chemical Society Faraday Transactions I, 1989, 85, 1117.	1.0	36
34	Support morphology-dependent alloying behaviour and interfacial effects of bimetallic Niâ€“Cu/CeO₂ catalysts. Chemical Science, 2019, 10, 3556-3566.	3.7	34
35	Influence of the metal precursor on the catalytic behavior of Pt/Ceria catalysts in the preferential oxidation of CO in the presence of H2 (PROX). Journal of Colloid and Interface Science, 2015, 443, 45-55.	5.0	32
36	Improvement of Air/Fuel Ratio Operating Window and Hydrothermal Stability for Pd-Only Three-Way Catalysts through a Pdâ€“Ce₂Zr₂O₈ Superstructure Interaction. Environmental Science & Technology, 2015, 49, 7989-7995.	4.6	31

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37	Acetylene hydrogenation over structured Auâ€“Pd catalysts. Faraday Discussions, 2016, 188, 499-523.	1.6	30
38	Mechanistic Insights into the Desorption of Methanol and Dimethyl Ether Over ZSM-5 Catalysts. Catalysis Letters, 2018, 148, 474-488.	1.4	25
39	Effect of spatial origin and hydrocarbon composition on bacterial consortia community structure and hydrocarbon biodegradation rates. FEMS Microbiology Ecology, 2018, 94, .	1.3	25
40	Kinetic analysis of the steam reforming of ethanol over Ni/SiO₂ for the elucidation of metal-dominated reaction pathways. Reaction Chemistry and Engineering, 2018, 3, 883-897.	1.9	24
41	The Potential of Cuâ€SAPOâ€44 in the Selective Catalytic Reduction of NO_x with NH₃. ChemCatChem, 2016, 8, 3740-3745.	1.8	23
42	Efficient synthesis of the Cu-SAPO-44 zeolite with excellent activity for selective catalytic reduction of NO by NH3. Catalysis Today, 2019, 332, 35-41.	2.2	23
43	Use of Water as a Solvent in Directing Hydrogenation Reactions of Aromatic Acids over Pd/carbon Nanofibre Catalysts. Catalysis Letters, 2007, 119, 16-20.	1.4	22
44	Characterisation of microbial communities of drill cuttings piles from offshore oil and gas installations. Marine Pollution Bulletin, 2019, 142, 169-177.	2.3	21
45	Chronic Environmental Perturbation Influences Microbial Community Assembly Patterns. Environmental Science & Technology, 2022, 56, 2300-2311.	4.6	21
46	Pressure and temperature effects on deepâ€sea hydrocarbonâ€degrading microbial communities in subarctic sediments. MicrobiologyOpen, 2019, 8, e00768.	1.2	20
47	Surface and bulk carbonate formation in calcium oxide during CO2 capture. Applied Energy, 2017, 202, 365-376.	5.1	17
48	Electric-Field-Assisted Facile Synthesis of Metal Nanoparticles. ACS Sustainable Chemistry and Engineering, 2019, 7, 1271-1278.	3.2	13
49	Gold modified cobalt-based Fischer-Tropsch catalysts for conversion of synthesis gas to liquid fuels. Frontiers of Chemical Science and Engineering, 2013, 7, 262-269.	2.3	12
50	Removal of Confined Ionic Liquid from a Metal Organic Framework by Extraction with Molecular Solvents. Journal of Physical Chemistry C, 2017, 121, 10577-10586.	1.5	12
51	Bacterial Community Response in Deep Faroe-Shetland Channel Sediments Following Hydrocarbon Entrainment With and Without Dispersant Addition. Frontiers in Marine Science, 2018, 5, .	1.2	12
52	An oxygen pool from YBaCo₄O₇-based oxides for soot combustion. Catalysis Science and Technology, 2016, 6, 4511-4515.	2.1	11
53	Nonâ€Thermal Plasma Activation of Goldâ€Based Catalysts for Lowâ€Temperature Waterâ€“Gas Shift Catalysis. Angewandte Chemie, 2017, 129, 5671-5675.	1.6	11
54	Use of carbon-based composites to enhance performance of TiO2 for the simultaneous removal of nitrates and organics from aqueous environments. Environmental Science and Pollution Research, 2018, 25, 32001-32014.	2.7	10

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55	Confirmation of Chirality in Homogeneous and Heterogeneous Salenâ€Based Catalysts. ChemCatChem, 2011, 3, 699-703.	1.8	9
56	Metal-promoted titania photocatalysis for destruction of nitrates and organics from aqueous environments. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170060.	1.6	9
57	Rapidâ€Scan Operando Infrared Spectroscopy. ChemCatChem, 2016, 8, 1905-1908.	1.8	8
58	Cation Dependent Carbonate Speciation and the Effect of Water. Journal of Physical Chemistry C, 2016, 120, 17570-17578.	1.5	6
59	Quantification of hydrocarbon species on surfaces by combined microbalance-FTIR. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 181, 65-72.	2.0	6
60	Study of the Interaction of an Iron Phthalocyanine Complex over Surface Modified Carbon Nanotubes. Materials, 2021, 14, 4067.	1.3	4
61	In-situ infrared spectroscopy as a non-invasive technique to study carbon sequestration at high pressure and high temperature. International Journal of Greenhouse Gas Control, 2016, 51, 126-135.	2.3	3
62	NOx Storage on BaTi0.8Cu0.2O3 Perovskite Catalysts: Addressing a Feasible Mechanism. Nanomaterials, 2021, 11, 2133.	1.9	3
63	Advective pore-water transport of hydrocarbons in North East Scotland coastal sands. Environmental Science and Pollution Research, 2018, 25, 28445-28459.	2.7	2
64	Dehydroaromatization of methane over noble metal loaded Mo/H-ZSM-5 zeolite catalysts. Applied Petrochemical Research, 2021, 11, 235-248.	1.3	2
65	Effects of Superdispersant-25 on the sorption dynamics of naphthalene and phenanthrene in marine sediments. Journal of Soils and Sediments, 2019, 19, 1576-1586.	1.5	1
66	Adsorption of Probe Molecules on Nanostructured Oxides. , 2006, , 311-334.		0