Morris D Argyle

List of Publications by Year
in descending order

65 papers	4,117 citations	201674 27 h-index	123424 61 g-index
66 all docs	66 docs citations	66 times ranked	5070 citing authors

#	Article	IF	Citations
1	Heterogeneous Catalyst Deactivation and Regeneration: A Review. Catalysts, 2015, 5, 145-269.	3.5	1,213
2	CO2 hydrogenation to high-value products via heterogeneous catalysis. Nature Communications, 2019, 10, 5698.	12.8	571
3	Effect of Catalyst Structure on Oxidative Dehydrogenation of Ethane and Propane on Alumina-Supported Vanadia. Journal of Catalysis, 2002, 208, 139-149.	6.2	298
4	Progress in O2 separation for oxy-fuel combustionâ€“A promising way for cost-effective CO2 capture: A review. Progress in Energy and Combustion Science, 2018, 67, 188-205.	31.2	135
5	Ethane Oxidative Dehydrogenation Pathways on Vanadium Oxide Catalysts. Journal of Physical Chemistry B, 2002, 106, 5421-5427.	2.6	114
6	Chemical and Thermal Sintering of Supported Metals with Emphasis on Cobalt Catalysts During Fischerâ€“Tropsch Synthesis. Chemical Reviews, 2020, 120, 4455-4533.	47.7	100
7	Effect of oxygen on nonthermal plasma reactions of nitrogen oxides in nitrogen. AIChE Journal, 2005, 51, 1800-1812.	3.6	87
8	Extent of Reduction of Vanadium Oxides during Catalytic Oxidation of Alkanes Measured by in-Situ UVâ^'Visible Spectroscopy. Journal of Physical Chemistry B, 2004, 108, 2345-2353.	2.6	84
9	Production of hydrogen and sulfur from hydrogen sulfide in a nonthermal-plasma pulsed corona discharge reactor. Chemical Engineering Science, 2007, 62, 2216-2227.	3.8	75
10	CO2 gasification of Powder River Basin coal catalyzed by a cost-effective and environmentally friendly iron catalyst. Applied Energy, 2015, 145, 295-305.	10.1	74
11	Catalytic gasification of a Powder River Basin coal. Fuel, 2013, 103, 161-170.	6.4	73
12	Effects of an environmentally-friendly, inexpensive composite ironâ€“sodium catalyst on coal gasification. Fuel, 2014, 116, 341-349.	6.4	63
13	Methane conversion in pulsed corona discharge reactors. Chemical Engineering Journal, 2006, 125, 67-79.	12.7	59
14	Simultaneous capture and mineralization of coal combustion flue gas carbon dioxide (CO2). Energy Procedia, 2011, 4, 1574-1583.	1.8	59
15	Catalytic CH4 reforming with CO2 over activated carbon based catalysts. Applied Catalysis A: General, 2014, 469, 387-397.	4.3	59
16	Effect of different alumina supports on performance of cobalt Fischer-Tropsch catalysts. Journal of Catalysis, 2018, 359, 92-100.	6.2	57
17	Pyrolysis characteristics and kinetics of residue from China Shenhua industrial direct coal liquefaction plant. Thermochimica Acta, 2014, 589, 1-10.	2.7	55
18	Advance in Using Plasma Technology for Modification or Fabrication of Carbonâ€Based Materials and Their Applications in Environmental, Material, and Energy Fields. Advanced Functional Materials, 2021, 31, 2006287.	14.9	55

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19	N Atom Radicals and N2(A3â‍u+) Found To Be Responsible for Nitrogen Oxides Conversion in Nonthermal Nitrogen Plasma. Industrial & Engineering Chemistry Research, 2004, 43, 5077-5088.	3.7	51
20	H2 and COx generation from coal gasification catalyzed by a cost-effective iron catalyst. Applied Catalysis A: General, 2013, 464-465, 207-217.	4.3	50
21	Cobalt Fischerâ€“Tropsch Catalyst Deactivation Modeled Using Generalized Power Law Expressions. Topics in Catalysis, 2014, 57, 415-429.	2.8	50
22	High temperature water gas shift catalysts with alumina. Applied Catalysis A: General, 2010, 379, 15-23.	4.3	46
23	In situ UVâ‍Visible Spectroscopic Measurements of Kinetic Parameters and Active Sites for Catalytic Oxidation of Alkanes on Vanadium Oxidesâ€. Journal of Physical Chemistry B, 2005, 109, 2414-2420.	2.6	42
24	Mechanism and catalytic performance for direct dimethyl ether synthesis by CO2 hydrogenation over CuZnZr/ferrierite hybrid catalyst. Journal of Environmental Sciences, 2020, 92, 106-117.	6.1	37
25	Energy efficiency of hydrogen sulfide decomposition in a pulsed corona discharge reactor. Chemical Engineering Science, 2009, 64, 4826-4834.	3.8	35
26	An optimized simulation model for iron-based Fischerâ€“Tropsch catalyst design: Transfer limitations as functions of operating and design conditions. Chemical Engineering Journal, 2015, 263, 268-279.	12.7	33
27	Desorption Kinetics of the Monoethanolamine/Macroporous TiO₂-Based CO₂ Separation Process. Energy & Fuels, 2011, 25, 2988-2996.	5.1	29
28	Advances in Catalyst Deactivation and Regeneration. Catalysts, 2015, 5, 949-954.	3.5	28
29	Photoreduction of CO2 in the presence of CH4 over g-C3N4 modified with TiO2 nanoparticles at room temperature. Green Energy and Environment, 2021, 6, 938-951.	8.7	26
30	Optical emission study of nonthermal plasma confirms reaction mechanisms involving neutral rather than charged species. Journal of Applied Physics, 2007, 101, 033303.	2.5	25
31	Supported Monoethanolamine for CO₂ Separation. Industrial & Engineering Chemistry Research, 2011, 50, 11343-11349.	3.7	24
32	Field Application of Accelerated Mineral Carbonation. Minerals (Basel, Switzerland), 2014, 4, 191-207.	2.0	23
33	Characterization of the mechanism of gasification of a powder river basin coal with a composite catalyst for producing desired syngases and liquids. Applied Catalysis A: General, 2014, 475, 116-126.	4.3	23
34	Effect of CO on NO and N2O conversions in nonthermal argon plasma. Journal of Applied Physics, 2006, 99, 113302.	2.5	21
35	In situ UV-visible assessment of extent of reduction during oxidation reactions on oxide catalysts. Chemical Communications, 2003, , 2082.	4.1	20
36	Effect of CO2on Nonthermal-Plasma Reactions of Nitrogen Oxides in N2. 1. PPM-Level Concentrations. Industrial & Engineering Chemistry Research, 2005, 44, 3925-3934.	3.7	20

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37	Effects of mixture of CO2 /CH4 as pyrolysis atmosphere on pine wood pyrolysis products. Renewable Energy, 2020, 162, 1243-1254.	8.9	20
38	Effect of reactor configuration on nitric oxide conversion in nitrogen plasma. AICHE Journal, 2005, 51, 1813-1821.	3.6	19
39	The effects of bimetallic Coâ€“Ru nanoparticles on Co/RuO 2 /Al 2 O 3 catalysts for the water gas shift and methanation. International Journal of Hydrogen Energy, 2014, 39, 14808-14816.	7.1	19
40	Catalytic gasification of a Powder River Basin coal with CO2 and H2O mixtures. Fuel Processing Technology, 2017, 161, 145-154.	7.2	19
41	Effects of O2Concentration on the Rate and Selectivity in Oxidative Dehydrogenation of Ethane Catalyzed by Vanadium Oxide:Â Implications for O2Staging and Membrane Reactors. Industrial & Engineering Chemistry Research, 2003, 42, 5462-5466.	3.7	16
42	Effects of Ag promotion and preparation method on cobalt Fischer-Tropsch catalysts supported on silica-modified alumina. Journal of Catalysis, 2018, 362, 118-128.	6.2	16
43	A cost-effective approach to realization of the efficient methane chemical-looping combustion by using coal fly ash as a support for oxygen carrier. Applied Energy, 2018, 230, 393-402.	10.1	16
44	Effects of preparation variables on an alumina-supported FeCuK Fischerâ€“Tropsch catalyst. Catalysis Science and Technology, 2014, 4, 4289-4300.	4.1	15
45	The effects of doping alumina with silica in alumina-supported NiO catalysts for oxidative dehydrogenation of ethane. Microporous and Mesoporous Materials, 2020, 293, 109799.	4.4	15
46	The effect of gas pressure on NO conversion energy efficiency in nonthermal nitrogen plasma. Chemical Engineering Science, 2005, 60, 1927-1937.	3.8	14
47	Catalytic regeneration of mercury sorbents. Journal of Hazardous Materials, 2013, 262, 642-648.	12.4	14
48	On the kinetics and mechanism of Fischerâ€“Tropsch synthesis on a highly active iron catalyst supported on silica-stabilized alumina. Catalysis Today, 2016, 261, 67-74.	4.4	14
49	Low Temperature Oxidative Dehydrogenation of Ethane by Ce-Modified NiNb Catalysts. Industrial & Engineering Chemistry Research, 2018, 57, 5234-5240.	3.7	14
50	A kinetic study on the structural and functional roles of lanthana in iron-based high temperature waterâ€“gas shift catalysts. International Journal of Hydrogen Energy, 2014, 39, 7306-7317.	7.1	13
51	A new approach of reduction of carbon dioxide emission and optimal use of carbon and hydrogen content for the desired syngas production from coal. Journal of Cleaner Production, 2020, 265, 121786.	9.3	12
52	Effect of CO2on Nonthermal-Plasma Reactions of Nitrogen Oxides in N2. 2. Percent-Level Concentrations. Industrial & Engineering Chemistry Research, 2005, 44, 3935-3946.	3.7	11
53	Metalâ€“support interactions in Feâ€“Cuâ€“K admixed with SAPO-34 catalysts for highly selective transformation of CO₂ and H₂ into lower olefins. Journal of Materials Chemistry A, 2021, 9, 21877-21887.	10.3	11
54	0.03 V Electrolysis Voltage Driven Hydrazine Assisted Hydrogen Generation on NiCo phosphide Nanowires Supported NiCoHydroxide Nanosheets. ChemElectroChem, 2020, 7, 3089-3097.	3.4	10

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55	Adsorption of Mercury with Modified Thief Carbons. Journal of Environmental Engineering, ASCE, 2012, 138, 386-391.	1.4	9
56	In Situ UV-Visible Assessment of Iron-Based High-Temperature Water-Gas Shift Catalysts Promoted with Lanthana: An Extent of Reduction Study. Catalysts, 2018, 8, 63.	3.5	8
57	Flow-Through Atmospheric Pressure-Atomic Layer Deposition Reactor for Thin-Film Deposition in Capillary Columns. Analytical Chemistry, 2022, 94, 7483-7491.	6.5	6
58	Effect of Drying Temperature on Iron Fischer-Tropsch Catalysts Prepared by Solvent Deficient Precipitation. Journal of Nanomaterials, 2017, 2017, 1-11.	2.7	4
59	Application of Green Chemistry in Energy Production. Journal of Physical Chemistry A, 2010, 114, 3743-3743.	2.5	3
60	Progresses Made in Coal-Based Energy and Fuel Production. Energy & Fuels, 2009, 23, 4709-4709.	5.1	2
61	A new holder/container with a porous cover for atomic layer deposition on particles, with transport analysis and detailed characterization of the resulting materials. Surface and Interface Analysis, 2021, 53, 156-166.	1.8	1
62	A New Assessment Method to Easily Identify Areas Needing Improvement in Course-level Learning Outcomes. , 0, , .		1
63	Developing and Assessing Leadership in Engineering Students. , 0, , .		1
64	Commemorative Issue in Honor of Professor Calvin H. Bartholomewâ€™s 75th Birthday. Catalysts, 2018, 8, 533.	3.5	0
65	Results And Analysis Of A Required Senior Exam To Assess Learning Of Course Competencies.. , 0, , .		0