James J Spivey

List of Publications by Year
in descending order

83 papers	7,135 citations	87888 38 h-index	62596 80 g-index
92 all docs	92 docs citations	92 times ranked	6280 citing authors

#	Article	IF	Citations
1	A review of dry (CO₂) reforming of methane over noble metal catalysts. Chemical Society Reviews, 2014, 43, 7813-7837.	38.1	1,616
2	Complete catalytic oxidation of volatile organics. Industrial & Engineering Chemistry Research, 1987, 26, 2165-2180.	3.7	799
3	Heterogeneous catalytic synthesis of ethanol from biomass-derived syngas. Chemical Society Reviews, 2007, 36, 1514.	38.1	572
4	Catalytic aromatization of methane. Chemical Society Reviews, 2014, 43, 792-803.	38.1	347
5	Heterogeneous Catalytic Conversion of Dry Syngas to Ethanol and Higher Alcohols on Cu-Based Catalysts. ACS Catalysis, 2011, 1, 641-656.	11.2	306
6	Clean liquid fuels from direct coal liquefaction: chemistry, catalysis, technological status and challenges. Energy and Environmental Science, 2011, 4, 311-345.	30.8	305
7	Design and Synthesis of Copperâ€"Cobalt Catalysts for the Selective Conversion of Synthesis Gas to Ethanol and Higher Alcohols. Angewandte Chemie - International Edition, 2014, 53, 6397-6401.	13.8	209
8	Development of cobaltâ€"copper nanoparticles as catalysts for higher alcohol synthesis from syngas. Catalysis Today, 2009, 147, 100-106.	4.4	151
9	Kinetic and mechanistic study of dry (CO2) reforming of methane over Rh-substituted La2Zr2O7 pyrochlores. Journal of Catalysis, 2014, 316, 78-92.	6.2	143
10	Characterization of coke deposited on Pt/alumina catalyst during reforming of liquid hydrocarbons. Applied Catalysis A: General, 2005, 293, 145-152.	4.3	120
11	A review on dry reforming of methane over perovskite derived catalysts. Catalysis Today, 2021, 365, 2-23.	4.4	108
12	La and/or V oxide promoted Rh/SiO2 catalysts: Effect of temperature, H2/CO ratio, space velocity, and pressure on ethanol selectivity from syngas. Journal of Catalysis, 2010, 272, 204-209.	6.2	96
13	Catalysis in the development of clean energy technologies. Catalysis Today, 2005, 100, 171-180.	4.4	89
14	Effect of reaction temperature on activity of Pt- and Ru-substituted lanthanum zirconate pyrochlores (La2Zr2O7) for dry (CO2) reforming of methane (DRM). Journal of CO2 Utilization, 2013, 1, 37-42.	6.8	87
15	Acetone condensation and selective hydrogenation to MIBK on Pd and Pt hydrotalcite-derived MgAl mixed oxide catalysts. Applied Catalysis A: General, 2005, 296, 128-136.	4.3	86
16	CO Adsorption Behavior of Cu/SiO₂, Co/SiO₂, and CuCo/SiO₂ Catalysts Studied by in Situ DRIFTS. Journal of Physical Chemistry C, 2012, 116, 7931-7939.	3.1	86
17	Effect of Partial Fe Substitution in La_{0.9}Sr_{0.1}NiO₃ Perovskite-Derived Catalysts on the Reaction Mechanism of Methane Dry Reforming. ACS Catalysis, 2020, 10, 12466-12486.	11.2	80
18	Preparation and characterization of lanthanum-promoted cobaltâ€"copper catalysts for the conversion of syngas to higher oxygenates: Formation of cobalt carbide. Journal of Catalysis, 2016, 339, 1-8.	6.2	78

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19	Catalytic partial oxidation of n-tetradecane in the presence of sulfur or polynuclear aromatics: Effects of support and metal. Applied Catalysis A: General, 2006, 311, 8-16.	4.3	77
20	Preferential oxidation of carbon monoxide with Pt/Fe monolithic catalysts: interactions between external transport and the reverse water-gas-shift reaction. Applied Catalysis B: Environmental, 2003, 46, 601-611.	20.2	75
21	Metal foam supported Pt catalysts for the selective oxidation of CO in hydrogen. Applied Catalysis A: General, 2005, 281, 1-9.	4.3	64
22	Preferential oxidation of carbon monoxide with iron-promoted platinum catalysts supported on metal foams. Applied Catalysis A: General, 2006, 302, 22-31.	4.3	64
23	Catalytic partial oxidation of a diesel surrogate fuel using an Ru-substituted pyrochlore. Catalysis Today, 2010, 155, 84-91.	4.4	60
24	Dry Reforming of Methane on Rh-Doped Pyrochlore Catalysts: A Steady-State Isotopic Transient Kinetic Study. ACS Catalysis, 2016, 6, 3826-3833.	11.2	59
25	Structural Characterization of Ni-Substituted Hexaaluminate Catalysts Using EXAFS, XANES, XPS, XRD, and TPR. Journal of Physical Chemistry C, 2010, 114, 7888-7894.	3.1	56
26	Synthesis, characterization, and catalytic activity of Rh-based lanthanum zirconate pyrochlores for higher alcohol synthesis. Catalysis Today, 2013, 207, 65-73.	4.4	56
27	Catalytic partial oxidation of n-tetradecane using Rh and Sr substituted pyrochlores: Effects of sulfur. Catalysis Today, 2009, 145, 121-126.	4.4	55
28	Fuel constituent effects on fuel reforming properties for fuel cell applications. Fuel, 2009, 88, 817-825.	6.4	51
29	Effect of Li Promoter on titania-supported Rh catalyst for ethanol formation from CO hydrogenation. Catalysis Today, 2010, 149, 91-97.	4.4	50
30	EXAFS and FT-IR Characterization of Mn and Li Promoted Titania-Supported Rh Catalysts for CO Hydrogenation. ACS Catalysis, 2011, 1, 1298-1306.	11.2	50
31	CO2 Reforming of CH4 over Ru-Substituted Pyrochlore Catalysts: Effects of Temperature and Reactant Feed Ratio. Energy & Fuels, 2012, 26, 1989-1998.	5.1	48
32	CH4â€“CO2 reforming over Ni-substituted barium hexaaluminate catalysts. Applied Catalysis A: General, 2013, 455, 129-136.	4.3	43
33	Effect of metal foam supports on the selective oxidation of CO on Fe-promoted Pt/Î³-Al2O3. Applied Catalysis A: General, 2005, 281, 11-18.	4.3	42
34	A DRIFTS study of CO adsorption and hydrogenation on Cu-based coreâ€“shell nanoparticles. Catalysis Science and Technology, 2012, 2, 621.	4.1	42
35	Effect of ZrO2, Al2O3 and La2O3 on cobaltâ€“copper catalysts for higher alcohols synthesis. Applied Catalysis A: General, 2015, 507, 75-81.	4.3	42
36	<i>110th Anniversary</i>: Dry Reforming of Methane over Ni- and Sr-Substituted Lanthanum Zirconate Pyrochlore Catalysts: Effect of Ni Loading. Industrial & Engineering Chemistry Research, 2019, 58, 19386-19396.	3.7	41

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37	Characterization and activity study of the Rh-substituted pyrochlores for CO2 (dry) reforming of CH4. Applied Petrochemical Research, 2013, 3, 117-129.	1.3	40
38	Electrodeposited Cuâ€“ZnO and Mnâ€“Cuâ€“ZnO nanowire/tube catalysts for higher alcohols from syngas. Catalysis Today, 2009, 147, 126-132.	4.4	39
39	Reduction processes in Cu/SiO2, Co/SiO2, and CuCo/SiO2 catalysts. Catalysis Today, 2012, 182, 60-66.	4.4	39
40	Support and particle size effects on direct NO decomposition over platinum. Catalysis Today, 2004, 96, 11-20.	4.4	34
41	Role of metal substitution in lanthanum zirconate pyrochlores (La2Zr2O7) for dry (CO2) reforming of methane (DRM). Applied Petrochemical Research, 2012, 2, 27-35.	1.3	34
42	Methane dehydroaromatization over molybdenum supported on sulfated zirconia catalysts. Applied Catalysis A: General, 2019, 575, 25-37.	4.3	30
43	Copper Coreâ€“Porous Manganese Oxide Shell Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 14500-14506.	3.1	29
44	Fe-based Fischer Tropsch synthesis of biomass-derived syngas: Effect of synthesis method. Catalysis Communications, 2015, 65, 76-80.	3.3	28
45	Recovery of volatile organics from small industrial sources. Environmental Progress, 1988, 7, 31-40.	0.7	27
46	Characterization of calcination temperature on a Ni-substituted lanthanum-strontium-zirconate pyrochlore. Ceramics International, 2017, 43, 16744-16752.	4.8	27
47	Steady-state isotopic transient kinetic analysis on Pd-supported hexaaluminates used for methane combustion in the presence and absence of NO. Catalysis Today, 2000, 59, 205-217.	4.4	25
48	Methane reforming over Ni-based pyrochlore catalyst: deactivation studies for different reactions. Applied Petrochemical Research, 2016, 6, 201-207.	1.3	25
49	Effects of fuel cell anode recycle on catalytic fuel reforming. Journal of Power Sources, 2007, 168, 477-483.	7.8	23
50	Reducing the deactivation of Ni-metal during the catalytic partial oxidation of a surrogate diesel fuel mixture. Catalysis Today, 2010, 154, 210-216.	4.4	22
51	Catalytic partial oxidation of CH4 over Ni-substituted barium hexaaluminate catalysts. Catalysis Today, 2010, 157, 166-169.	4.4	22
52	Carbon formation on Rh-substituted pyrochlore catalysts during partial oxidation of liquid hydrocarbons. Applied Catalysis A: General, 2015, 502, 96-104.	4.3	22
53	Metal organic framework-mediated synthesis of potassium-promoted cobalt-based catalysts for higher oxygenates synthesis. Catalysis Today, 2017, 298, 209-215.	4.4	22
54	The effect of La substitution by Sr- and Ca- in Ni substituted Lanthanum Zirconate pyrochlore catalysts for dry reforming of methane. Applied Catalysis A: General, 2020, 602, 117721.	4.3	22

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55	Effect of H2/CO ratio and temperature on methane selectivity in the synthesis of ethanol on Rh-based catalysts. Catalysis Communications, 2008, 9, 2308-2311.	3.3	19
56	Study of attrition of Fe-based catalyst supported over spent FCC catalysts and their Fischerâ€“Tropsch activity in a fixed bed reactor. Applied Catalysis A: General, 2010, 372, 184-190.	4.3	19
57	Effect of Structural Promoters on Fe-Based Fischerâ€“Tropsch Synthesis of Biomass Derived Syngas. Topics in Catalysis, 2014, 57, 526-537.	2.8	19
58	Attrition resistance of spray-dried iron Fâ€“T catalysts: Effect of activation conditions. Catalysis Today, 2002, 71, 319-326.	4.4	18
59	Characterization of Bulk Structure in Zinc Orthotitanate: A Density Functional Theory and EXAFS Investigation. Journal of the American Ceramic Society, 2008, 91, 584-590.	3.8	17
60	Rh, Ni, and Ca substituted pyrochlore catalysts for dry reforming of methane. Applied Catalysis A: General, 2011, , .	4.3	16
61	Economic effects of catalyst deactivation during VOC oxidation. Environmental Progress, 1993, 12, 182-185.	0.7	15
62	Kinetics of the catalytic destruction of cyanogen chloride. Applied Catalysis B: Environmental, 1995, 5, 389-403.	20.2	15
63	Partial oxidation of liquid hydrocarbons in the presence of oxygen-conducting supports: Effect of catalyst layer deposition. Fuel, 2010, 89, 1193-1201.	6.4	15
64	Effect of Steam During Fischerâ€“Tropsch Synthesis Using Biomass-Derived Syngas. Catalysis Letters, 2017, 147, 62-70.	2.6	14
65	Sulfated hafnia as a support for Mo oxide: A novel catalyst for methane dehydroaromatization. Catalysis Today, 2020, 343, 8-17.	4.4	14
66	Direct conversion of methane to higher hydrocarbons using AlBr₃â€“HBr superacid catalyst. Chemical Communications, 2011, 47, 785-787.	4.1	13
67	Mo oxide supported on sulfated hafnia: Novel solid acid catalyst for direct activation of ethane & propane. Applied Catalysis A: General, 2020, 602, 117696.	4.3	13
68	Low Temperature Direct Conversion of Methane using a Solid Superacid. ChemCatChem, 2018, 10, 5019-5024.	3.7	12
69	Characterization of LaRhO3 perovskites for dry (CO2) reforming of methane (DRM). Chemical Papers, 2014, 68, .	2.2	11
70	Methane steam reforming at low steam-to-carbon ratio: The effect of Y doping in Rh substituted lanthanum zirconates. Applied Catalysis A: General, 2020, 606, 117802.	4.3	11
71	Methane dehydroaromatization using Mo supported on sulfated zirconia catalyst: Effect of promoters. Catalysis Today, 2021, 365, 71-79.	4.4	11
72	Novel Pulse Electrodeposited Coâ€“Cuâ€“ZnO Nanowire/tube Catalysts for C₁â€“C₄ Alcohols and C₂â€“C₆ (Except C₅) Hydrocarbons from CO and H₂. Journal of Physical Chemistry C, 2012, 116, 10924-10933.	3.1	10

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73	Promotional Effect of Cr in Sulfated Zirconiaâ€Based Mo Catalyst for Methane Dehydroaromatization. Energy Technology, 2020, 8, 1900555.	3.8	9
74	Effect of calcination temperature on steam reforming activity of Ni-based pyrochlore catalysts. Journal of Rare Earths, 2020, 38, 711-718.	4.8	9
75	Partial Oxidation of <i>n</i>-Tetradecane over 1 wt % Pt/Î³-Al₂O₃ and Co_{0.4}Mo_{0.6}C_{<i>x</i>} Carbide Catalysts: A Comparative Study. Industrial & Engineering Chemistry Research, 2008, 47, 7663-7671.	3.7	8
76	Deactivation of Reforming Catalysts. , 2011, , 285-315.		8
77	Effect of the Catalyst Bed Configuration on the Partial Oxidation of Liquid Hydrocarbons. Energy & Fuels, 2013, 27, 4363-4370.	5.1	7
78	Probing the Surface Acidity of Supported Aluminum Bromide Catalysts. Catalysts, 2020, 10, 869.	3.5	7
79	Catalytic Processes for the Production of Clean Fuels. , 2013, , 87-126.		5
80	Effect of water vapour in the catalytic destruction of cyanogen chloride. Journal of the Chemical Society Chemical Communications, 1993, , 911.	2.0	3
81	Direct conversion of methane to C2 hydrocarbons using W supported on sulfated zirconia solid acid catalyst. SN Applied Sciences, 2020, 2, 1.	2.9	3
82	Direct Catalytic Low-Temperature Conversion of CO2 and Methane to Oxygenates. , 2021, , 227-250.		1
83	A novel approach of methane dehydroaromatization using group VIB metals (Cr, Mo, W) supported on sulfated zirconia. MRS Advances, 2020, 5, 3407-3417.	0.9	1