Luke M Neal

List of Publications by Year
in descending order

35	1,887	22	34
papers	citations	h-index (304743)	g-index (377865)

36	36	36	1629
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Methane Catalytic Pyrolysis by Microwave and Thermal Heating over Carbon Nanotube-Supported Catalysts: Productivity, Kinetics, and Energy Efficiency. Industrial & Engineering Chemistry Research, 2022, 61, 5080-5092.	3.7	13
2	Autothermal Chemical Looping Oxidative Dehydrogenation of Ethane: Redox Catalyst Performance, Longevity, and Process Analysis. Energy & Fuels, 2022, 36, 9736-9744.	5.1	8
3	A tailored multi-functional catalyst for ultra-efficient styrene production under a cyclic redox scheme. Nature Communications, 2021, 12, 1329.	12.8	35
4	Zeolite-assisted core-shell redox catalysts for efficient light olefin production via cyclohexane redox oxidative cracking. Chemical Engineering Journal, 2021, 409, 128192.	12.7	17
5	LaNi_{<i>x</i>}Fe_{1â€“<i>x</i>}O_{3âˆ’Î´} as a Robust Redox Catalyst for CO₂ Splitting and Methane Partial Oxidation. Energy & Fuels, 2021, 35, 13921-13929.	5.1	14
6	Ethane to liquids via a chemical looping approach â€“ Redox catalyst demonstration and process analysis. Chemical Engineering Journal, 2021, 417, 128886.	12.7	13
7	Sodium tungstate-promoted CaMnO3 as an effective, phase-transition redox catalyst for redox oxidative cracking of cyclohexane. Journal of Catalysis, 2020, 385, 213-223.	6.2	26
8	Recent Advances in Intensified Ethylene Productionâ€”A Review. ACS Catalysis, 2019, 9, 8592-8621.	11.2	227
9	Intensified Ethylene Production via Chemical Looping through an Exergetically Efficient Redox Scheme. IScience, 2019, 19, 894-904.	4.1	38
10	Perovskite oxides for redox oxidative cracking of n-hexane under a cyclic redox scheme. Applied Catalysis B: Environmental, 2019, 246, 30-40.	20.2	43
11	Mixed iron-manganese oxides as redox catalysts for chemical loopingâ€“oxidative dehydrogenation of ethane with tailorable heat of reactions. Applied Catalysis B: Environmental, 2019, 257, 117885.	20.2	50
12	Effects of Sodium and Tungsten Promoters on Mg₆MnO₈-Based Coreâ€“Shell Redox Catalysts for Chemical Loopingâ€”Oxidative Dehydrogenation of Ethane. ACS Catalysis, 2019, 9, 3174-3186.	11.2	52
13	Modularâ€scale ethane to liquids via chemical looping oxidative dehydrogenation: Redox catalyst performance and process analysis. Journal of Advanced Manufacturing and Processing, 2019, 1, .	2.4	8
14	Manganese silicate based redox catalysts for greener ethylene production via chemical looping â€“ oxidative dehydrogenation of ethane. Applied Catalysis B: Environmental, 2018, 232, 77-85.	20.2	55
15	Perovskites as Geo-inspired Oxygen Storage Materials for Chemical Looping and Three-Way Catalysis: A Perspective. ACS Catalysis, 2018, 8, 8213-8236.	11.2	152
16	Intensification of Ethylene Production from Naphtha via a Redox Oxy-Cracking Scheme: Process Simulations and Analysis. Engineering, 2018, 4, 714-721.	6.7	43
17	Effect of Promoters on Manganese-Containing Mixed Metal Oxides for Oxidative Dehydrogenation of Ethane via a Cyclic Redox Scheme. ACS Catalysis, 2017, 7, 5163-5173.	11.2	96
18	Oxidative dehydrogenation of ethane under a cyclic redox scheme â€“ Process simulations and analysis. Energy, 2017, 119, 1024-1035.	8.8	62

#	Article	IF	Citations
19	Oxidative Dehydrogenation of Ethane: A Chemical Looping Approach. Energy Technology, 2016, 4, 1200-1208.	3.8	88
20	Li-Promoted La_{<i>x</i>}Sr_{2â€“<i>x</i>}FeO_{4âˆ’Î´} Coreâ€“Shell Redox Catalysts for Oxidative Dehydrogenation of Ethane under a Cyclic Redox Scheme. ACS Catalysis, 2016, 6, 7293-7302.	11.2	95
21	Parahydrogen enhanced NMR reveals correlations in selective hydrogenation of triple bonds over supported Pt catalyst. Physical Chemistry Chemical Physics, 2015, 17, 26121-26129.	2.8	29
22	Parahydrogen-Induced Polarization by Pairwise Replacement Catalysis on Pt and Ir Nanoparticles. Journal of the American Chemical Society, 2015, 137, 1938-1946.	13.7	56
23	Effect of core and shell compositions on MeO @La Sr1âˆ’FeO3 coreâ€“shell redox catalysts for chemical looping reforming of methane. Applied Energy, 2015, 157, 391-398.	10.1	94
24	Effect of support on redox stability of iron oxide for chemical looping conversion of methane. Applied Catalysis B: Environmental, 2015, 164, 371-379.	20.2	137
25	Dynamic Methane Partial Oxidation Using a Fe₂O₃@La_{0.8}Sr_{0.2}FeO_{3-Î´} Coreâ€“Shell Redox Catalyst in the Absence of Gaseous Oxygen. ACS Catalysis, 2014, 4, 3560-3569.	11.2	163
26	Effect of Liquid Barrier Layer on Open-Cathode Direct Methanol Fuel Cell Systems. , 2011, , .		1
27	Characterization of palladium oxide catalysts supported on nanoparticle metal oxides for the oxidative coupling of 4-methylpyridine. Journal of Molecular Catalysis A, 2011, 335, 210-221.	4.8	24
28	The influence of ZnO, CeO2 and ZrO2 on nanoparticle-oxide-supported palladium oxide catalysts for the oxidative coupling of 4-methylpyridine. Journal of Molecular Catalysis A, 2011, 341, 42-50.	4.8	14
29	Characterization of alumina-supported palladium oxide catalysts used in the oxidative coupling of 4-methylpyridine. Journal of Molecular Catalysis A, 2010, 325, 25-35.	4.8	17
30	Characterization of ZrO2-promoted Cu/ZnO/nano-Al2O3 methanol steam reforming catalysts. Applied Surface Science, 2010, 256, 7345-7353.	6.1	44
31	Effects of nanoparticle and porous metal oxide supports on the activity of palladium catalysts in the oxidative coupling of 4-methylpyridine. Journal of Molecular Catalysis A, 2009, 307, 29-36.	4.8	12
32	Câ€“H activation and Câ€“C coupling of 4-methylpyridine using palladium supported on nanoparticle alumina. Journal of Molecular Catalysis A, 2008, 284, 141-148.	4.8	33
33	Steam reforming of methanol using Cu-ZnO catalysts supported on nanoparticle alumina. Applied Catalysis B: Environmental, 2008, 84, 631-642.	20.2	126
34	Oxygen Generation from Carbon Dioxide for Advanced Life Support. ECS Transactions, 2007, 11, 173-179.	0.5	1
35	Concurrent CO₂ Control and O₂ Generation for Space Suits and Other Advanced Life Support: A Feasibility Study. , 0, , .		0