

Feng

List of Publications by Year in descending order

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82
papers

5,067
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76326

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91884

69
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83
docs citations

83
times ranked

2810
citing authors

#	ARTICLE	IF	CITATIONS
1	CaMn _{0.9} Ti _{0.1} O ₃ based redox catalysts for chemical looping – Oxidative dehydrogenation of ethane: Effects of Na ₂ MoO ₄ promoter and degree of reduction on the reaction kinetics. <i>Catalysis Today</i> , 2023, 417, 113725.	4.4	2
2	Chemical looping air separation with Sr _{0.8} Ca _{0.2} Fe _{0.9} Co _{0.1} O _{3-δ} perovskite sorbent: Packed bed modeling, verification, and optimization. <i>Chemical Engineering Journal</i> , 2022, 429, 132370.	12.7	14
3	Ce stabilized Ni–SrO as a catalytic phase transition sorbent for integrated CO ₂ capture and CH ₄ reforming. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3077-3085.	10.3	19
4	Selective catalytic oxidation of ammonia to nitric oxide via chemical looping. <i>Nature Communications</i> , 2022, 13, 718.	12.8	18
5	High-throughput oxygen chemical potential engineering of perovskite oxides for chemical looping applications. <i>Energy and Environmental Science</i> , 2022, 15, 1512-1528.	30.8	35
6	Methane Catalytic Pyrolysis by Microwave and Thermal Heating over Carbon Nanotube-Supported Catalysts: Productivity, Kinetics, and Energy Efficiency. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 5080-5092.	3.7	13
7	Perovskite-Based Phase Transition Sorbents for Sorption-Enhanced Oxidative Steam Reforming of Glycerol. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 6434-6445.	6.7	3
8	Autothermal Chemical Looping Oxidative Dehydrogenation of Ethane: Redox Catalyst Performance, Longevity, and Process Analysis. <i>Energy & Fuels</i> , 2022, 36, 9736-9744.	5.1	8
9	One-step synthesis of single-site vanadium substitution in 1T-WS ₂ monolayers for enhanced hydrogen evolution catalysis. <i>Nature Communications</i> , 2021, 12, 709.	12.8	137
10	A tailored multi-functional catalyst for ultra-efficient styrene production under a cyclic redox scheme. <i>Nature Communications</i> , 2021, 12, 1329.	12.8	35
11	Net Electronic Charge as an Effective Electronic Descriptor for Oxygen Release and Transport Properties of SrFeO ₃ -Based Oxygen Sorbents. <i>Chemistry of Materials</i> , 2021, 33, 2446-2456.	6.7	22
12	Zeolite-assisted core-shell redox catalysts for efficient light olefin production via cyclohexane redox oxidative cracking. <i>Chemical Engineering Journal</i> , 2021, 409, 128192.	12.7	17
13	Co and Mo Co-doped Fe ₂ O ₃ for Selective Ethylene Production via Chemical Looping Oxidative Dehydrogenation. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 8002-8011.	6.7	21
14	Selective hydrogen combustion as an effective approach for intensified chemical production via the chemical looping strategy. <i>Fuel Processing Technology</i> , 2021, 218, 106827.	7.2	17
15	Liquid Metal Shell as an Effective Iron Oxide Modifier for Redox-Based Hydrogen Production at Intermediate Temperatures. <i>ACS Catalysis</i> , 2021, 11, 10228-10238.	11.2	13
16	LaNi _x Fe _{1-x} O _{3-δ} as a Robust Redox Catalyst for CO ₂ Splitting and Methane Partial Oxidation. <i>Energy & Fuels</i> , 2021, 35, 13921-13929.	5.1	14
17	Ethane to liquids via a chemical looping approach – Redox catalyst demonstration and process analysis. <i>Chemical Engineering Journal</i> , 2021, 417, 128886.	12.7	13
18	Chemical Looping Air Separation Using a Perovskite-Based Oxygen Sorbent: System Design and Process Analysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 12185-12195.	6.7	28

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19	Core-Shell Fe ₂ O ₃ @La ^x Sr _x FeO ₃ Material for Catalytic Oxidations: Coverage of Iron Oxide Core, Oxygen Storage Capacity and Reactivity of Surface Oxygens. <i>Materials</i> , 2021, 14, 7355.	2.9	7
20	Rh promoted perovskites for exceptional low temperature methane conversion to syngas. <i>Catalysis Today</i> , 2020, 350, 149-155.	4.4	11
21	Reduction Kinetics of Perovskite Oxides for Selective Hydrogen Combustion in the Context of Olefin Production. <i>Energy Technology</i> , 2020, 8, 1900738.	3.8	7
22	and site Codoped SrFeO ₃ Oxygen Sorbents for Enhanced Chemical Looping Air Separation. <i>ChemSusChem</i> , 2020, 13, 385-393.	6.8	49
23	CO ₂ Reforming of Ethanol: Density Functional Theory Calculations, Microkinetic Modeling, and Experimental Studies. <i>ACS Catalysis</i> , 2020, 10, 9624-9633.	11.2	12
24	Zeolite Perovskite Composites as Effective Redox Catalysts for Autothermal Cracking of n-Hexane. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 14268-14273.	6.7	13
25	Substituted SrFeO ₃ as robust oxygen sorbents for thermochemical air separation: correlating redox performance with compositional and structural properties. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 8924-8932.	2.8	43
26	Mixed conductive composites for Low-Temperature™ thermo-chemical CO ₂ splitting and syngas generation. <i>Journal of Materials Chemistry A</i> , 2020, 8, 13173-13182.	10.3	20
27	Chemical looping beyond combustion a perspective. <i>Energy and Environmental Science</i> , 2020, 13, 772-804.	30.8	325
28	MoO ₃ /Al ₂ O ₃ catalysts for chemical-looping oxidative dehydrogenation of ethane. <i>Journal of Chemical Physics</i> , 2020, 152, 044713.	3.0	21
29	A molten carbonate shell modified perovskite redox catalyst for anaerobic oxidative dehydrogenation of ethane. <i>Science Advances</i> , 2020, 6, eaaz9339.	10.3	61
30	Continuous flow synthesis of phase transition-resistant titania microparticles with tunable morphologies. <i>RSC Advances</i> , 2020, 10, 8340-8347.	3.6	7
31	Sodium tungstate-promoted CaMnO ₃ as an effective, phase-transition redox catalyst for redox oxidative cracking of cyclohexane. <i>Journal of Catalysis</i> , 2020, 385, 213-223.	6.2	26
32	Sr _{1-x} Ca _x Fe _{1-y} Co _y O _{3-δ} as facile and tunable oxygen sorbents for chemical looping air separation. <i>JPhys Energy</i> , 2020, 2, 025007.	5.3	18
33	Effect of Sodium Tungstate Promoter on the Reduction Kinetics of CaMn _{0.9} Fe _{0.1} O ₃ for Chemical Looping Oxidative Dehydrogenation of Ethane. <i>Chemical Engineering Journal</i> , 2020, 398, 125583.	12.7	23
34	Recent Advances in Intensified Ethylene Production A Review. <i>ACS Catalysis</i> , 2019, 9, 8592-8621.	11.2	227
35	Modified Ceria for Low Temperature CO ₂ Utilization: A Chemical Looping Route to Exploit Industrial Waste Heat. <i>Advanced Energy Materials</i> , 2019, 9, 1901963.	19.5	43
36	Intensified Ethylene Production via Chemical Looping through an Exergetically Efficient Redox Scheme. <i>IScience</i> , 2019, 19, 894-904.	4.1	38

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37	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
38	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
39	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
40	Redox oxidative cracking of n-hexane with Fe-substituted barium hexaaluminates as redox catalysts. Catalysis Science and Technology, 2019, 9, 2211-2220.	4.1	14
41	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
42	Oxygen Vacancy Creation Energy in Mn-Containing Perovskites: An Effective Indicator for Chemical Looping with Oxygen Uncoupling. Chemistry of Materials, 2019, 31, 689-698.	6.7	41
43	Oxidative dehydrogenation of ethane using MoO ₃ /Fe ₂ O ₃ catalysts in a cyclic redox mode. Catalysis Today, 2018, 317, 50-55.	4.4	30
44	Manganeseâ€“containing redox catalysts for selective hydrogen combustion under a cyclic redox scheme. AIChE Journal, 2018, 64, 3141-3150.	3.6	27
45	Calcium cobaltate: a phase-change catalyst for stable hydrogen production from bio-glycerol. Energy and Environmental Science, 2018, 11, 660-668.	30.8	38
46	Alkali Metal-Promoted La_xSr₂FeO₄ Redox Catalysts for Chemical Looping Oxidative Dehydrogenation of Ethane. ACS Catalysis, 2018, 8, 1757-1766.	11.2	74
47	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
48	Continuous Synthesis of Monodisperse Yolkâ€“Shell Titania Microspheres. Chemistry of Materials, 2018, 30, 8948-8958.	6.7	16
49	Perovskite Promoted Mixed Cobaltâ€“Iron Oxides for Enhanced Chemical Looping Air Separation. ACS Sustainable Chemistry and Engineering, 2018, 6, 15528-15540.	6.7	30
50	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
51	Intensification of Ethylene Production from Naphtha via a Redox Oxy-Cracking Scheme: Process Simulations and Analysis. Engineering, 2018, 4, 714-721.	6.7	43
52	Chemical looping at the nanoscale â€“ challenges and opportunities. Current Opinion in Chemical Engineering, 2018, 20, 143-150.	7.8	49
53	Particulate Formation from a Copper Oxide-Based Oxygen Carrier in Chemical Looping Combustion for CO₂ Capture. Environmental Science & Technology, 2017, 51, 2482-2490.	10.0	26
54	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

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55	Oxidative dehydrogenation of ethane under a cyclic redox scheme – Process simulations and analysis. Energy, 2017, 119, 1024-1035.	8.8	62
56	Perovskite nanocomposites as effective CO ₂ -splitting agents in a cyclic redox scheme. Science Advances, 2017, 3, e1701184.	10.3	97
57	Iron-Doped BaMnO ₃ for Hybrid Water Splitting and Syngas Generation. ChemSusChem, 2017, 10, 3402-3408.	6.8	46
58	Rh-promoted mixed oxides for –low-temperature–methane partial oxidation in the absence of gaseous oxidants. Journal of Materials Chemistry A, 2017, 5, 11930-11939.	10.3	50
59	Oxidative Dehydrogenation of Ethane: A Chemical Looping Approach. Energy Technology, 2016, 4, 1200-1208.	3.8	88
60	Low temperature platinum atomic layer deposition on nylon-6 for highly conductive and catalytic fiber mats. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	2.1	13
61	Li-Promoted La _x Sr ₂ FeO ₄ Core-Shell Redox Catalysts for Oxidative Dehydrogenation of Ethane under a Cyclic Redox Scheme. ACS Catalysis, 2016, 6, 7293-7302.	11.2	95
62	CaMn ^B O ₃ (B = Al, V, Fe, Co, and Ni) perovskite based oxygen carriers for chemical looping with oxygen uncoupling (CLOU). Applied Energy, 2016, 174, 80-87.	10.1	79
63	Perovskite-structured AMn _x B ^x O ₃ (A = Ca or Ba; B = Fe or Ni) redox catalysts for partial oxidation of methane. Catalysis Science and Technology, 2016, 6, 4535-4544.	4.1	54
64	Methane partial oxidation using FeO _x @La _{0.8} Sr _{0.2} FeO ₃ core-shell catalyst – transient pulse studies. Physical Chemistry Chemical Physics, 2015, 17, 31297-31307.	2.8	75
65	Ca ^A MnO ₃ (A = Sr and Ba) perovskite based oxygen carriers for chemical looping with oxygen uncoupling (CLOU). Applied Energy, 2015, 157, 358-367.	10.1	96
66	Effect of core and shell compositions on MeO@LaSr ^{Fe} O ₃ core-shell redox catalysts for chemical looping reforming of methane. Applied Energy, 2015, 157, 391-398.	10.1	94
67	Coke-resistant Ni@SiO ₂ catalyst for dry reforming of methane. Applied Catalysis B: Environmental, 2015, 176-177, 513-521.	20.2	242
68	Perovskite promoted iron oxide for hybrid water-splitting and syngas generation with exceptional conversion. Energy and Environmental Science, 2015, 8, 535-539.	30.8	89
69	Iron-containing mixed-oxide composites as oxygen carriers for Chemical Looping with Oxygen Uncoupling (CLOU). Fuel, 2015, 139, 1-10.	6.4	62
70	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
71	A hybrid solar-redox scheme for liquid fuel and hydrogen coproduction. Energy and Environmental Science, 2014, 7, 2033-2042.	30.8	65
72	Fe ₂ O ₃ @La _x Sr _{1-x} FeO ₃ Core-Shell Redox Catalyst for Methane Partial Oxidation. ChemCatChem, 2014, 6, 790-799.	3.7	108

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73	Dynamic Methane Partial Oxidation Using a $\text{Fe}_{2}\text{O}_{3}@ \text{La}_{0.8}\text{Sr}_{0.2}\text{FeO}_{3-\delta}$ Core-Shell Redox Catalyst in the Absence of Gaseous Oxygen. ACS Catalysis, 2014, 4, 3560-3569.	11.2	163
74	Investigation of perovskite supported composite oxides for chemical looping conversion of syngas. Fuel, 2014, 134, 521-530.	6.4	72
75	Iron Oxide with Facilitated O^{2-} Transport for Facile Fuel Oxidation and CO_{2} Capture in a Chemical Looping Scheme. ACS Sustainable Chemistry and Engineering, 2013, 1, 364-373.	6.7	116
76	Coal-Direct Chemical Looping Gasification for Hydrogen Production: Reactor Modeling and Process Simulation. Energy & Fuels, 2012, 26, 3680-3690.	5.1	114
77	Role of metal oxide support in redox reactions of iron oxide for chemical looping applications: experiments and density functional theory calculations. Energy and Environmental Science, 2011, 4, 3661.	30.8	138
78	Ionic diffusion in the oxidation of iron—effect of support and its implications to chemical looping applications. Energy and Environmental Science, 2011, 4, 876.	30.8	140
79	Syngas chemical looping gasification process: Bench-scale studies and reactor simulations. AIChE Journal, 2010, 56, 2186-2199.	3.6	128
80	Chemical Looping Technology and Its Fossil Energy Conversion Applications. Industrial & Engineering Chemistry Research, 2010, 49, 10200-10211.	3.7	181
81	Clean coal conversion processes — progress and challenges. Energy and Environmental Science, 2008, 1, 248.	30.8	236
82	Flow Synthesis of Single and Mixed Metal Oxides. Chemistry Methods, 0, , .	3.8	1