A fluidized-bed combustion process with inherent CO2 chemical-looping combustion

Chemical Engineering Science 56, 3101-3113 DOI: 10.1016/s0009-2509(01)00007-0

Citation Report

#	Article	IF	CITATIONS
1	The use of iron oxide as an oxygen carrier in chemical-looping combustion of methane with inherent separation of CO2. Fuel, 2001, 80, 1953-1962.	3.4	354
2	Characteristics of the NiO/hexaaluminate for chemical looping combustion. Korean Journal of Chemical Engineering, 2003, 20, 471-475.	1.2	27
3	Gas leakage measurements in a cold model of an interconnected fluidized bed for chemical-looping combustion. Powder Technology, 2003, 134, 210-217.	2.1	82
4	Reactivity of Some Metal Oxides Supported on Alumina with Alternating Methane and OxygenApplication for Chemical-Looping Combustion. Energy & Fuels, 2003, 17, 643-651.	2.5	294
5	Optimizing the Fuel Reactor for Chemical Looping Combustion. , 2003, , 173.		13
6	Inherent CO2 Capture Using Chemical Looping Combustion in a Natural Gas Fired Power Cycle. Journal of Engineering for Gas Turbines and Power, 2004, 126, 316-321.	0.5	108
7	Multicycle Reduction and Oxidation of Different Types of Iron Oxide ParticlesApplication to Chemical-Looping Combustion. Energy & amp; Fuels, 2004, 18, 628-637.	2.5	260
8	A Two-Compartment Fluidized Bed Reactor for CO2Capture by Chemical-Looping Combustion. Chemical Engineering and Technology, 2004, 27, 1318-1326.	0.9	101
9	Comparison of iron-, nickel-, copper- and manganese-based oxygen carriers for chemical-looping combustion. Fuel, 2004, 83, 1215-1225.	3.4	550
10	A new type of coal gas fueled chemical-looping combustion. Fuel, 2004, 83, 2411-2417.	3.4	136
11	Investigation of Fe2O3with MgAl2O4for Chemical-Looping Combustion. Industrial & Engineering Chemistry Research, 2004, 43, 6978-6987.	1.8	183
12	Selection of Oxygen Carriers for Chemical-Looping Combustion. Energy & amp; Fuels, 2004, 18, 371-377.	2.5	646
13	Reduction and Oxidation Kinetics of a Copper-Based Oxygen Carrier Prepared by Impregnation for Chemical-Looping Combustion. Industrial & Engineering Chemistry Research, 2004, 43, 8168-8177.	1.8	210
14	Comparison of nickel- and iron-based oxygen carriers in chemical looping combustion for CO capture in power generation. Fuel, 2005, 84, 993-1006.	3.4	166
15	Temperature variations in the oxygen carrier particles during their reduction and oxidation in a chemical-looping combustion system. Chemical Engineering Science, 2005, 60, 851-862.	1.9	138
16	Parametric study of chemical looping combustion for tri-generation of hydrogen, heat, and electrical power with CO2 capture. International Journal of Energy Research, 2005, 29, 739.	2.2	31
17	Heterogeneous combustion: Recent developments and new opportunities for chemical engineers. AICHE Journal, 2005, 51, 2876-2884.	1.8	14
18	The grace projectDevelopment of oxygen carrier particles for chemical-looping combustion. Design and operation of a 10 kW chemical-looping combustor. , 2005, , 115-123.		62

#	ARTICLE	IF	CITATIONS
19	SIMULATION OF MASS AND ENERGY BALANCES OF A CHEMICAL-LOOPING COMBUSTION SYSTEM. Clean Air, 2005, 6, 1-14.	0.0	13
20	Construction and 100 h of Operational Experience of A 10-kW Chemical-Looping Combustor. , 2005, , 625-645.		73
21	Hydrogen and power production with integrated carbon dioxide capture by chemical-looping reforming. , 2005, , 125-134.		15
22	Novel Capture Processes. Oil and Gas Science and Technology, 2005, 60, 497-508.	1.4	42
23	Integrated Hydrogen and Power Production with CO2Capture Using Chemical-Looping ReformingRedox Reactivity of Particles of CuO, Mn2O3, NiO, and Fe2O3Using SiO2as a Support. Industrial & Engineering Chemistry Research, 2005, 44, 3485-3496.	1.8	248
24	Design and Fluid Dynamic Analysis of a Bench-Scale Combustion System with CO2Separationâ^'Chemical-Looping Combustion. Industrial & Engineering Chemistry Research, 2005, 44, 546-556.	1.8	104
25	The Performance in a Fixed Bed Reactor of Copper-Based Oxides on Titania as Oxygen Carriers for Chemical Looping Combustion of Methane. Energy & amp; Fuels, 2005, 19, 433-441.	2.5	85
26	Characterization Study and Five-Cycle Tests in a Fixed-Bed Reactor of Titania-Supported Nickel Oxide as Oxygen Carriers for the Chemical-Looping Combustion of Methane. Environmental Science & Technology, 2005, 39, 5796-5803.	4.6	57
27	Carbon Formation on Nickel and Iron Oxide-Containing Oxygen Carriers for Chemical-Looping Combustion. Industrial & Engineering Chemistry Research, 2005, 44, 668-676.	1.8	206
28	Investigation of Chemical Looping Combustion by Solid Fuels. 2. Redox Reaction Kinetics and Product Characterization with Coal, Biomass, and Solid Waste as Solid Fuels and CuO as an Oxygen Carrier. Energy & Fuels, 2006, 20, 1845-1854.	2.5	180
29	Recent Progress in CO2Capture/Sequestration: A Review. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2006, 28, 1261-1279.	1.2	105
30	Chemical-Looping Combustion with NiO and Fe2O3in a Thermobalance and Circulating Fluidized Bed Reactor with Double Loops. Industrial & Engineering Chemistry Research, 2006, 45, 2689-2696.	1.8	208
31	Characterization and Performance in a Multicycle Test in a Fixed-Bed Reactor of Silica-Supported Copper Oxide as Oxygen Carrier for Chemical-Looping Combustion of Methane. Energy & Fuels, 2006, 20, 148-154.	2.5	68
32	Investigation of Chemical Looping Combustion by Solid Fuels. 1. Process Analysis. Energy & Fuels, 2006, 20, 1836-1844.	2.5	233
33	Performance in a Fixed-Bed Reactor of Titania-Supported Nickel Oxide as Oxygen Carriers for the Chemical-Looping Combustion of Methane in Multicycle Tests. Industrial & Engineering Chemistry Research, 2006, 45, 157-165.	1.8	39
34	Defluidization Conditions for a Fluidized Bed of Iron Oxide-, Nickel Oxide-, and Manganese Oxide-Containing Oxygen Carriers for Chemical-Looping Combustion. Industrial & Engineering Chemistry Research, 2006, 45, 968-977.	1.8	116
35	Chemical Looping Combustion in a 10 kWth Prototype Using a CuO/Al2O3 Oxygen Carrier:  Effect of Operating Conditions on Methane Combustion. Industrial & Engineering Chemistry Research, 2006, 45, 6075-6080.	1.8	270
36	Effect of Pressure on the Behavior of Copper-, Iron-, and Nickel-Based Oxygen Carriers for Chemical-Looping Combustion. Energy & Fuels, 2006, 20, 26-33.	2.5	214

	Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο	Report	
#	ARTICLE Creating a Synergy Effect by Using Mixed Oxides of Iron- and Nickel Oxides in the Combustion of	IF 2.5	CITATIONS
	Methane in a Chemical-Looping Combustion Reactor. Energy & amp; Fuels, 2006, 20, 2399-2407.		
38	Comparison of oxygen carriers for chemical-looping combustion. Thermal Science, 2006, 10, 93-107.	0.5	93
39	<i>In situ</i> gasification of coal using steam with chemical looping: a technique for isolating CO ₂ from burning a solid fuel. Journal of the Energy Institute, 2006, 79, 187-190.	2.7	106
40	Chemical-looping combustion in a 300W continuously operating reactor system using a manganese-based oxygen carrier. Fuel, 2006, 85, 1174-1185.	3.4	259
41	A 300W laboratory reactor system for chemical-looping combustion with particle circulation. Fuel, 2006, 85, 1428-1438.	3.4	139
42	Using steam reforming to produce hydrogen with carbon dioxide capture by chemical-looping combustion. International Journal of Hydrogen Energy, 2006, 31, 1271-1283.	3.8	219
43	Use of NiO/NiAl2O4 Particles in a 10 kW Chemical-Looping Combustor. Industrial & Engineering Chemistry Research, 2006, 45, 5911-5919.	1.8	77
44	Investigation of Mn3O4 With Stabilized ZrO2 for Chemical-Looping Combustion. Chemical Engineering Research and Design, 2006, 84, 807-818.	2.7	140
45	Thermal Analysis of Chemical-Looping Combustion. Chemical Engineering Research and Design, 2006, 84, 795-806.	2.7	377
46	Combustion of Syngas and Natural Gas in a 300 W Chemical-Looping Combustor. Chemical Engineering Research and Design, 2006, 84, 819-827.	2.7	137
47	CO2 Capture and Storage. Chemical Engineering Research and Design, 2006, 84, 739-763.	2.7	327
48	Redox Investigation of Some Oxides of Transition-State Metals Ni, Cu, Fe, and Mn Supported on SiO2and MgAl2O4. Energy & Fuels, 2006, 20, 34-44.	2.5	228
50	In situgasification of a solid fuel and CO2separation using chemical looping. AICHE Journal, 2006, 52, 3325-3328.	1.8	172
51	A Novel Solar-Hybrid Gas Turbine Combined Cycle With Inherent CO2 Separation Using Chemical-Looping Combustion by Solar Heat Source. Journal of Solar Energy Engineering, Transactions of the ASME, 2006, 128, 275-284.	1.1	51
52	System Design and Analysis of a Direct Hydrogen from Coal System with CO2Capture. Energy & Fuels, 2007, 21, 1688-1694.	2.5	15
53	Chemical Looping Gasification and Combustion Processes for CO2 Sequestration. Journal of the Society of Powder Technology, Japan, 2007, 44, 638-644.	0.0	2
54	Spinel-Supported Oxygen Carriers for Inherent CO ₂ Separation during Power Generation. Industrial & Engineering Chemistry Research, 2007, 46, 8597-8601.	1.8	25
55	Reaction Kinetics of Freeze-Granulated NiO/MgAl2O4Oxygen Carrier Particles for Chemical-Looping Combustion. Energy & Fuels, 2007, 21, 610-618.	2.5	91

#	Article	IF	CITATIONS
56	Reduction Kinetics of Cu-, Ni-, and Fe-Based Oxygen Carriers Using Syngas (CO + H2) for Chemical-Looping Combustion. Energy & amp; Fuels, 2007, 21, 1843-1853.	2.5	217
57	Solid Waste Management of a Chemical-Looping Combustion Plant using Cu-Based Oxygen Carriers. Environmental Science & Technology, 2007, 41, 5882-5887.	4.6	37
58	Packed Bed Reactor Technology for Chemical-Looping Combustion. Industrial & Engineering Chemistry Research, 2007, 46, 4212-4220.	1.8	224
59	Syngas Redox (SGR) Process to Produce Hydrogen from Coal Derived Syngas. Energy & Fuels, 2007, 21, 2900-2908.	2.5	163
60	Reactivity and stability of Co-Ni/Al2O3 oxygen carrier in multicycle CLC. AICHE Journal, 2007, 53, 1817-1829.	1.8	119
61	Part-load analysis of a chemical looping combustion (CLC) combined cycle with CO2 capture. Energy, 2007, 32, 360-370.	4.5	90
62	Co–Ni/Al2O3 oxygen carrier for fluidized bed chemical-looping combustion: Desorption kinetics and metal–support interaction. Chemical Engineering Science, 2007, 62, 5464-5472.	1.9	83
63	The use of iron oxide as oxygen carrier in a chemical-looping reactor. Fuel, 2007, 86, 1021-1035.	3.4	284
64	A quantitative comparison of gas turbine cycles with CO2 capture. Energy, 2007, 32, 10-24.	4.5	303
65	Chemical-looping combustion using syngas as fuel. International Journal of Greenhouse Gas Control, 2007, 1, 158-169.	2.3	139
66	Chemical looping combustion of coal in interconnected fluidized beds. Science in China Series D: Earth Sciences, 2007, 50, 230-240.	0.9	25
67	A review of the sponge iron process for the storage and transmission of remotely generated marine energy. International Journal of Hydrogen Energy, 2007, 32, 5039-5049.	3.8	41
68	Mapping of the range of operational conditions for Cu-, Fe-, and Ni-based oxygen carriers in chemical-looping combustion. Chemical Engineering Science, 2007, 62, 533-549.	1.9	546
69	Reduction and oxidation kinetics of Mn3O4/Mg–ZrO2 oxygen carrier particles for chemical-looping combustion. Chemical Engineering Science, 2007, 62, 6556-6567.	1.9	136
70	Clean combustion of solid fuels. Applied Energy, 2008, 85, 73-79.	5.1	101
71	Reactivity and stability of Ni/Al2O3 oxygen carrier for chemical-looping combustion (CLC). Chemical Engineering Science, 2008, 63, 2994-3007.	1.9	96
72	Solid fuels in chemical-looping combustion. International Journal of Greenhouse Gas Control, 2008, 2, 180-193.	2.3	312
73	Reduction kinetics of a fluidizable nickel–alumina oxygen carrier for chemicalâ€looping combustion. Canadian Journal of Chemical Engineering, 2008, 86, 323-334.	0.9	61

#	Article	IF	CITATIONS
74	Process analysis of CO ₂ capture from flue gas using carbonation/calcination cycles. AICHE Journal, 2008, 54, 1912-1925.	1.8	80
75	Multiphase CFD-based models for chemical looping combustion process: Fuel reactor modeling. Powder Technology, 2008, 183, 401-409.	2.1	125
76	A mechanistic investigation of a calcium-based oxygen carrier for chemical looping combustion. Combustion and Flame, 2008, 154, 489-506.	2.8	108
77	Chemical-looping combustion (CLC) for inherent <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si144.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mi>CO</mml:mi></mml:mrow><mml:mrow><mml:mn>2separationsâ€"a review. Chemical Engineering Science. 2008. 63. 4433-4451.</mml:mn></mml:mrow></mml:msub></mml:math 	ml <mark>1.9</mark> m> <td>nml:mrow><</td>	nml:mrow><
78	Design and operation of a 10kWth chemical-looping combustor for solid fuels – Testing with South African coal. Fuel, 2008, 87, 2713-2726.	3.4	376
79	160h of chemical-looping combustion in a 10kW reactor system with a NiO-based oxygen carrier. International Journal of Greenhouse Gas Control, 2008, 2, 520-530.	2.3	166
80	Separation of hydrogen from syngas using a regenerative system. International Journal of Hydrogen Energy, 2008, 33, 332-339.	3.8	61
81	Emission characteristics and combustion instabilities in an oxy-fuel swirl-stabilized combustor. Journal of Zhejiang University: Science A, 2008, 9, 1582-1589.	1.3	15
82	Multicycle Study on Chemical-Looping Combustion of Simulated Coal Gas with a CaSO ₄ Oxygen Carrier in a Fluidized Bed Reactor. Energy & Fuels, 2008, 22, 3661-3672.	2.5	86
83	Sol–Gel-Derived NiO/NiAl ₂ O ₄ Oxygen Carriers for Chemical-Looping Combustion by Coal Char. Energy & Fuels, 2008, 22, 898-905.	2.5	88
84	Effect of Temperature on Reduction of CaSO ₄ Oxygen Carrier in Chemical-Looping Combustion of Simulated Coal Gas in a Fluidized Bed Reactor. Industrial & Engineering Chemistry Research, 2008, 47, 8148-8159.	1.8	89
85	Experimental Study of O2â^'CO2 Production for the Oxyfuel Combustion Using a Co-Based Oxygen Carrier. Industrial & Engineering Chemistry Research, 2008, 47, 7147-7153.	1.8	33
86	Use of Coal as Fuel for Chemical-Looping Combustion with Ni-Based Oxygen Carrier. Industrial & Engineering Chemistry Research, 2008, 47, 9279-9287.	1.8	45
87	Investigation of Gasification Chemical Looping Combustion Combined Cycle Performance. Energy & Fuels, 2008, 22, 961-966.	2.5	35
88	Hydrogen Production from the Steamâ^'Iron Process with Direct Reduction of Iron Oxide by Chemical Looping Combustion of Coal Char. Energy & Fuels, 2008, 22, 2570-2579.	2.5	88
89	Limestone Calcination with CO ₂ Capture (II): Decomposition in CO ₂ /Steam and CO ₂ /N ₂ Atmospheres. Energy & Fuels, 2008, 22, 2326-2331.	2.5	70
90	OIL SHALE – A LOCAL ASSET UNDER GLOBAL CONSTRAINT. Oil Shale, 2009, 26, 357.	0.5	13
91	The use of iron oxide as an oxygen carrier in chemical looping combustion taking CO and biomass gas as as fuels. , 2009, , .		0

#	Article	IF	CITATIONS
92	Experimental research on gas-solid flow in a dual fluidized bed. , 2009, , .		1
93	Advancements in Development of Chemical-Looping Combustion: A Review. International Journal of Chemical Engineering, 2009, 2009, 1-16.	1.4	106
94	Simulation of the Fuel Reactor of a Coal-Fired Chemical Looping Combustor. , 2009, , .		7
95	CO2 Capture from Flue Gases Using Three Ca-Based Sorbents in a Fluidized Bed Reactor. Journal of Environmental Engineering, ASCE, 2009, 135, 418-425.	0.7	10
96	Flame structure and NO generation in oxy-fuel combustion at high pressures. Energy Conversion and Management, 2009, 50, 1116-1123.	4.4	34
97	A novel dual circulating fluidized bed system for chemical looping processes. AICHE Journal, 2009, 55, 3255-3266.	1.8	160
98	Nickel―and Copperâ€Based Oxygen Carriers for Chemical Looping Combustion. Chemical Engineering and Technology, 2009, 32, 443-449.	0.9	29
99	Design of a Chemical Looping Combustor using a Dual Circulating Fluidized Bed (DCFB) Reactor System. Chemical Engineering and Technology, 2009, 32, 398-403.	0.9	109
100	Cold Flow Model Study on a Dual Circulating Fluidized Bed (DCFB) System for Chemical Looping Processes. Chemical Engineering and Technology, 2009, 32, 418-424.	0.9	79
101	Mapping of the Operating Conditions for an Interconnected Fluidized Bed Reactor for CO2Separation by Chemical Looping Combustion. Chemical Engineering and Technology, 2009, 32, 404-409.	0.9	13
102	Comprehensive Modeling Tool for Chemical Looping Based Processes. Chemical Engineering and Technology, 2009, 32, 410-417.	0.9	41
103	Reactivity of a CaSO4-oxygen carrier in chemical-looping combustion of methane in a fixed bed reactor. Korean Journal of Chemical Engineering, 2009, 26, 592-602.	1.2	37
104	Progress of energy system with chemical-looping combustion. Science Bulletin, 2009, 54, 906-919.	4.3	15
105	Chemical-looping with oxygen uncoupling using CuO/ZrO2 with petroleum coke. Fuel, 2009, 88, 683-690.	3.4	208
106	Syngas combustion in a chemical-looping combustion system using an impregnated Ni-based oxygen carrier. Fuel, 2009, 88, 2357-2364.	3.4	96
107	Experimental investigation of some metal oxides for chemical looping combustion in a fluidized bed reactor. Fuel, 2009, 88, 898-908.	3.4	52
108	Long-term integrity testing of spray-dried particles in a 10-kW chemical-looping combustor using natural gas as fuel. Fuel, 2009, 88, 2083-2096.	3.4	172
109	Chemical-looping with oxygen uncoupling for combustion of solid fuels. International Journal of Greenhouse Gas Control. 2009. 3. 11-19.	2.3	554

ARTICLE IF CITATIONS # Hydrogen production from two-step steam methane reforming in a fluidized bed reactor. 110 3.8 126 International Journal of Hydrogen Energy, 2009, 34, 1301-1309. Nickel on lanthanum-modified Î³-Al2O3 oxygen carrier for CLC: Reactivity and stability. Catalysis Today, 2.2 58 2009, 143, 179-186. Modeling of a 120kW chemical looping combustion reactor system using a Ni-based oxygen carrier. 112 1.9 74 Chemical Engineering Science, 2009, 64, 99-108. Experiments on chemical looping combustion of coal with a NiO based oxygen carrier. Combustion 183 and Flame, 2009, 156, 721-728. Performance of a NiO-based oxygen carrier for chemical looping combustion and reforming in a 120 114 1.8 57 kW unit. Energy Procedia, 2009, 1, 19-25. Natural minerals as oxygen carriers for chemical looping combustion in a dual circulating fluidized bed system. Energy Procedia, 2009, 1, 27-34. 1.8 Modeling of the chemical-looping combustion of methane using a Cu-based oxygen carrier. Energy 116 1.8 10 Procedia, 2009, 1, 391-398. NiO particles with Ca and Mg based additives produced by spray- drying as oxygen carriers for chemical-looping combustion. Energy Procedia, 2009, 1, 479-486. 1.8 Operating experience with chemical looping combustion in a 120 kW dual circulating fluidized bed 118 1.8 48 (DCFB) unit. Energy Procedia, 2009, 1, 1465-1472. On the development of novel reactor concepts for chemical looping combustion. Energy Procedia, 1.8 54 2009, 1, 1513-1519. High temperature behavior of NiO-based oxygen carriers for Chemical Looping Combustion. Energy 120 1.8 51 Procedia, 2009, 1, 3885-3892. Investigation of Different NiO/NiAl₂O₄ Particles as Oxygen Carriers for 2.5 Chemical-Looping Combustion. Energy & amp; Fuels, 2009, 23, 665-676. Methane Combustion in a 500 W_{th} Chemical-Looping Combustion System Using an 122 2.5 134 Impregnated Ni-Based Oxygen Carrier. Energy & amp; Fuels, 2009, 23, 130-142. Comparison of Two Ni-Based Oxygen Carriers for Chemical Looping Combustion of Natural Gas in 140 kW Continuous Looping Operation. Industrial & amp; Engineering Chemistry Research, 2009, 48, 1.8 5542-5547. Characterization of Chemical Looping Pilot Plant Performance via Experimental Determination of 124 2.544 Solids Conversion. Energy & amp; Fuels, 2009, 23, 1450-1455. Preliminary Assessment of a Concept of Looping Combustion of Carbon. Industrial & Amp; Engineering 1.8 Chemistry Research, 2009, 48, 102-109. High Reactivity and Mechanical Durability of NiO/NiAl₂O₄ and NiŎ/NiAl₂O₄/MgAl₂O₄ Oxygen Carrier Particles Used 126 1.8 56 for more than 1000 h in a 10 kW CLC Reactor. Industrial & amp; Engineering Chemistry Research, 2009, 48,7400-7405 Synthesis Gas Generation by Chemical-Looping Reforming Using Ce-Based Oxygen Carriers Modified 124 with Fe, Cu, and Mn Oxides. Energy & amp; Fuels, 2009, 23, 2095-2102.

#	Article	IF	CITATIONS
128	Effect of Fuel Gas Composition in Chemical-Looping Combustion with Ni-Based Oxygen Carriers. 2. Fate of Light Hydrocarbons. Industrial & Engineering Chemistry Research, 2009, 48, 2509-2518.	1.8	43
129	Experiment and Modeling of CO ₂ Capture from Flue Gases at High Temperature in a Fluidized Bed Reactor with Ca-Based Sorbents. Energy & Fuels, 2009, 23, 207-216.	2.5	64
130	Oxygen-carrier selection and thermal analysis of the chemical-looping process for hydrogen production. International Journal of Hydrogen Energy, 2010, 35, 12246-12254.	3.8	154
131	Effect of gas composition in Chemical-Looping Combustion with copper-based oxygen carriers: Fate of light hydrocarbons. International Journal of Greenhouse Gas Control, 2010, 4, 13-22.	2.3	46
132	Effect of gas composition in Chemical-Looping Combustion with copper-based oxygen carriers: Fate of sulphur. International Journal of Greenhouse Gas Control, 2010, 4, 762-770.	2.3	98
133	The application of a multistage-bed model for residence-time analysis in chemical-looping combustion of solid fuel. Chemical Engineering Science, 2010, 65, 5055-5066.	1.9	42
134	Investigation of NiO-based mixed oxides in a 300-W chemical-looping combustor. Chemical Engineering Research and Design, 2010, 88, 661-672.	2.7	46
135	Particuology and climate change. Particuology, 2010, 8, 507-513.	2.0	3
136	Chemicalâ€Iooping combustion process: Kinetics and mathematical modeling. AICHE Journal, 2010, 56, 1063-1079.	1.8	42
138	In situ gasification of a lignite coal and CO2 separation using chemical looping with a Cu-based oxygen carrier. Fuel, 2010, 89, 1623-1640.	3.4	111
139	Reactivity of a NiO/Al2O3 oxygen carrier prepared by impregnation for chemical-looping combustion. Fuel, 2010, 89, 3399-3409.	3.4	88
140	Thermodynamic study of combining chemical looping combustion and combined reforming of propane. Fuel, 2010, 89, 3141-3146.	3.4	19
141	Operating experience with chemical looping combustion in a 120kW dual circulating fluidized bed (DCFB) unit. International Journal of Greenhouse Gas Control, 2010, 4, 180-185.	2.3	146
142	Reduction of CaSO4 oxygen carrier with coal in chemical-looping combustion: Effects of temperature and gasification intermediate. International Journal of Greenhouse Gas Control, 2010, 4, 716-728.	2.3	51
143	Experimental validation of packed bed chemical-looping combustion. Chemical Engineering Science, 2010, 65, 92-97.	1.9	88
144	Equilibrium behaviour of a novel gas separation process, with application to carbon capture. Chemical Engineering Science, 2010, 65, 3907-3913.	1.9	5
145	Development and testing of an interconnected multiphase CFD-model for chemical looping combustion. Chemical Engineering Science, 2010, 65, 4732-4745.	1.9	74
146	Characterization of chemical looping combustion of coal in a 1kWth reactor with a nickel-based oxygen carrier. Combustion and Flame, 2010, 157, 934-942.	2.8	109

#	Article	IF	CITATIONS
147	Modeling of the chemical-looping combustion of methane using a Cu-based oxygen-carrier. Combustion and Flame, 2010, 157, 602-615.	2.8	118
148	Sulfur behavior in chemical looping combustion with NiO/Al2O3 oxygen carrier. Combustion and Flame, 2010, 157, 853-863.	2.8	57
150	Advanced oxygen production systems for power plants with integrated carbon dioxide (CO2) capture. , 2010, , 320-357.		3
151	A Low Temperature Solar Thermochemical Power Plant With CO2 Recovery Using Methanol-Fueled Chemical Looping Combustion. Journal of Solar Energy Engineering, Transactions of the ASME, 2010, 132, .	1.1	24
152	Reduction Properties of Physically Mixed Metallic Oxide Oxygen Carriers in Chemical Looping Combustion. Energy & Fuels, 2010, 24, 5359-5368.	2.5	93
153	Control-Based Modeling and Simulation of the Chemical-Looping Combustion Process. Industrial & amp; Engineering Chemistry Research, 2010, 49, 4566-4575.	1.8	12
154	Ilmenite Activation during Consecutive Redox Cycles in Chemical-Looping Combustion. Energy & Fuels, 2010, 24, 1402-1413.	2.5	277
155	Experimental Investigation of a CuO/Al ₂ O ₃ Oxygen Carrier for Chemical-Looping Combustion. Industrial & Engineering Chemistry Research, 2010, 49, 9720-9728.	1.8	44
156	Eliminating CO2 Emissions from Coal-Fired Power Plants. , 2010, , 127-173.		14
157	Carbon Capture and Storage (CCS). Power Systems, 2010, , 629-667.	0.3	1
157 158	Carbon Capture and Storage (CCS). Power Systems, 2010, , 629-667. Gasification and Chemical-Looping Combustion of a Lignite Char in a Fluidized Bed of Iron Oxide. Energy & amp; Fuels, 2010, 24, 3034-3048.	0.3 2.5	1 87
	Gasification and Chemical-Looping Combustion of a Lignite Char in a Fluidized Bed of Iron Oxide.		
158	Gasification and Chemical-Looping Combustion of a Lignite Char in a Fluidized Bed of Iron Oxide. Energy & Fuels, 2010, 24, 3034-3048.		87
158 159	 Gasification and Chemical-Looping Combustion of a Lignite Char in a Fluidized Bed of Iron Oxide. Energy & amp; Fuels, 2010, 24, 3034-3048. The Design and Tests in a Three Interconnected Fluidized Bed. , 2010, , . Biomass Direct Chemical Looping Conversion in a Fluidized Bed Reactor with Natural Hematite as an 		87 0
158 159 160	 Gasification and Chemical-Looping Combustion of a Lignite Char in a Fluidized Bed of Iron Oxide. Energy & amp; Fuels, 2010, 24, 3034-3048. The Design and Tests in a Three Interconnected Fluidized Bed., 2010,,. Biomass Direct Chemical Looping Conversion in a Fluidized Bed Reactor with Natural Hematite as an Oxygen Carrier., 2011,,. Experimental Investigation of Chemical-Looping Combustion in Packed Beds: A Parametric Study. 	2.5	87 0 3
158 159 160 161	Gasification and Chemical-Looping Combustion of a Lignite Char in a Fluidized Bed of Iron Oxide. Energy & amp; Fuels, 2010, 24, 3034-3048. The Design and Tests in a Three Interconnected Fluidized Bed. , 2010, , . Biomass Direct Chemical Looping Conversion in a Fluidized Bed Reactor with Natural Hematite as an Oxygen Carrier. , 2011, , . Experimental Investigation of Chemical-Looping Combustion in Packed Beds: A Parametric Study. Industrial & amp; Engineering Chemistry Research, 2011, 50, 1968-1980. Prospects of Al ₂ O ₃ and MgAl ₂ O ₄ -Supported CuO Oxygen Carriers in Chemical-Looping Combustion (CLC) and Chemical-Looping with Oxygen	2.5	87 0 3 62
158 159 160 161 162	Gasification and Chemical-Looping Combustion of a Lignite Char in a Fluidized Bed of Iron Oxide. Energy & amp; Fuels, 2010, 24, 3034-3048. The Design and Tests in a Three Interconnected Fluidized Bed., 2010, , . Biomass Direct Chemical Looping Conversion in a Fluidized Bed Reactor with Natural Hematite as an Oxygen Carrier., 2011, , . Experimental Investigation of Chemical-Looping Combustion in Packed Beds: A Parametric Study. Industrial & amp; Engineering Chemistry Research, 2011, 50, 1968-1980. Prospects of Al ₂ 0 ₃ and MgAl ₂ 0 ₄ -Supported CuO Oxygen Carriers in Chemical-Looping Combustion (CLC) and Chemical-Looping with Oxygen Uncoupling (CLOU). Energy & amp; Fuels, 2011, 25, 5493-5502. Multiphase Computational Fluid Dynamics (CFD) Modeling of Chemical Looping Combustion Using a CuO/Al ₂	2.5 1.8 2.5	87 0 3 62 133

#	Article	IF	Citations
166	Solubility of CO ₂ in an Aqueous Blend of Diethanolamine and Trisodium Phosphate. Journal of Chemical & Engineering Data, 2011, 56, 4691-4695.	1.0	30
167	Combustion Characteristics and Ash Formation of Pulverized Coal under Pressurized Oxy-Fuel Conditions. Energy & amp; Fuels, 2011, 25, 4333-4344.	2.5	58
168	Kinetics of Copper Oxidation in the Air Reactor of a Chemical Looping Combustion System using the Law of Additive Reaction Times. Industrial & Engineering Chemistry Research, 2011, 50, 13330-13339.	1.8	23
169	Novel oxygen carriers for chemical looping combustion: La1â^'xCexBO3 (B = Co, Mn) perovskites synthesized by reactive grinding and nanocasting. Energy and Environmental Science, 2011, 4, 4258.	15.6	103
170	Chemical Looping with Copper Oxide as Carrier and Coal as Fuel. Oil and Gas Science and Technology, 2011, 66, 209-221.	1.4	84
171	Using Low-Cost Iron-Based Materials as Oxygen Carriers for Chemical Looping Combustion. Oil and Gas Science and Technology, 2011, 66, 235-248.	1.4	62
172	Chemical Looping Combustion of Solid Fuels in a Laboratory Fluidized-bed Reactor. Oil and Gas Science and Technology, 2011, 66, 201-208.	1.4	17
173	Chemical Looping Pilot Plant Results Using a Nickel-Based Oxygen Carrier. Oil and Gas Science and Technology, 2011, 66, 173-180.	1.4	29
174	Simulations of a Circulating Fluidized Bed Chemical Looping Combustion System Utilizing Gaseous Fuel. Oil and Gas Science and Technology, 2011, 66, 301-311.	1.4	13
175	The Role of Attrition and Solids Recovery in a Chemical Looping Combustion Process. Oil and Gas Science and Technology, 2011, 66, 277-290.	1.4	25
176	A Study on the Role of Reaction Modeling in Multi-phase CFD-based Simulations of Chemical Looping Combustion. Oil and Gas Science and Technology, 2011, 66, 313-331.	1.4	22
177	Characterization and kinetics of reduction of CaSO4 with carbon monoxide for chemical-looping combustion. Combustion and Flame, 2011, 158, 2524-2539.	2.8	55
178	Reactivity of a spray-dried NiO/NiAl2O4 oxygen carrier for chemical-looping combustion. Chemical Engineering Science, 2011, 66, 4636-4644.	1.9	46
179	A comparative study of reaction models applied for chemical looping combustion. Chemical Engineering Research and Design, 2011, 89, 2714-2727.	2.7	32
180	Design study of a 150kWth double loop circulating fluidized bed reactor system for chemical looping combustion with focus on industrial applicability and pressurization. International Journal of Greenhouse Gas Control, 2011, 5, 467-474.	2.3	65
181	CFD simulation of a chemical-looping fuel reactor utilizing solid fuel. Chemical Engineering Science, 2011, 66, 3617-3627.	1.9	80
182	Exergoeconomic and exergoenvironmental evaluation of power plants including CO2 capture. Chemical Engineering Research and Design, 2011, 89, 1461-1469.	2.7	54
183	Kinetics of the chemical looping oxidation of H2 by a co-precipitated mixture of CuO and Al2O3. Chemical Engineering Research and Design, 2011, 89, 1511-1523.	2.7	39

#	Article	IF	CITATIONS
184	Hydrodynamic simulation of fuel-reactor in chemical looping combustion process. Chemical Engineering Research and Design, 2011, 89, 1501-1510.	2.7	36
185	Gasification inhibition in chemical-looping combustion with solid fuels. Combustion and Flame, 2011, 158, 393-400.	2.8	83
186	Investigation into compound CaSO4 oxygen carrier for chemical-looping combustion. Journal of Fuel Chemistry and Technology, 2011, 39, 161-168.	0.9	17
187	Heat and Mass Flow Control in an Interconnected Multiphase CFD Model for Chemical Looping Combustion. Chemical Engineering and Technology, 2011, 34, 1259-1270.	0.9	3
188	Design and operation assessment of an oxyfuel fluidized bed combustor. Experimental Thermal and Fluid Science, 2011, 35, 477-484.	1.5	39
189	A theoretical investigation of CLC in packed beds. Part 1: Particle model. Chemical Engineering Journal, 2011, 167, 297-307.	6.6	73
190	A theoretical investigation of CLC in packed beds. Part 2: Reactor model. Chemical Engineering Journal, 2011, 167, 369-376.	6.6	67
191	Computational fluid dynamic simulations of chemical looping fuel reactors utilizing gaseous fuels. Chemical Engineering Science, 2011, 66, 469-479.	1.9	74
192	AFM investigation of solid product layers of MgSO4 generated on MgO surfaces for the reaction of MgO with SO2 and O2. Chemical Engineering Science, 2011, 66, 1142-1149.	1.9	32
193	Carbon capture and utilization via chemical looping dry reforming. Chemical Engineering Research and Design, 2011, 89, 1533-1543.	2.7	131
194	Chemical-looping with oxygen uncoupling using combined Mn-Fe oxides, testing in batch fluidized bed. Energy Procedia, 2011, 4, 370-377.	1.8	84
195	Evaluation of different oxygen carriers for biomass tar reforming (I): Carbon deposition in experiments with toluene. Fuel, 2011, 90, 1049-1060.	3.4	63
196	Chemical – Looping with oxygen uncoupling using Mn/Mg-based oxygen carriers – Oxygen release and reactivity with methane. Fuel, 2011, 90, 941-950.	3.4	109
197	Steam carbon gasification of a nickel based oxygen carrier. Fuel, 2011, 90, 2461-2466.	3.4	12
198	Fluid dynamic simulation in a chemical looping combustion with two interconnected fluidized beds. Fuel Processing Technology, 2011, 92, 385-393.	3.7	47
199	Exergoeconomic and exergoenvironmental analyses of a combined cycle power plant with chemical looping technology. International Journal of Greenhouse Gas Control, 2011, 5, 475-482.	2.3	141
200	Characterization and evaluation of Fe2O3/Al2O3 oxygen carrier prepared by sol–gel combustion synthesis. Journal of Analytical and Applied Pyrolysis, 2011, 91, 105-113.	2.6	76
201	Chemical-looping combustion for power generation and carbon dioxide (CO 2) capture. , 2011, , 294-334.		2

#	Article	IF	CITATIONS
202	Solar Thermochemical Hybrid Trigeneration System With CO2 Capture Using Dimethyl Ether-Fueled Chemical-Looping Combustion. , 2011, , .		3
203	An Advanced Power-Generation System With CO2 Recovery Integrating DME Fueled Chemical-Looping Combustion. Journal of Energy Resources Technology, Transactions of the ASME, 2011, 133, .	1.4	9
204	RECENT ADVANCES IN CaSO ₄ OXYGEN CARRIER FOR CHEMICAL-LOOPING COMBUSTION (CLC) PROCESS. Chemical Engineering Communications, 2012, 199, 1463-1491.	1.5	26
205	Simulation on Operating Conditions of Chemical Looping Combustion of Methane in a Continuous Bubbling Fluidized-Bed Process. Energy & Fuels, 2012, 26, 1441-1448.	2.5	14
206	Comparison of natural ilmenites as oxygen carriers in chemical-looping combustion and influence of water gas shift reaction on gas composition. Chemical Engineering Research and Design, 2012, 90, 1351-1360.	2.7	83
207	Producer gas cleaning in a dual fluidized bed reformer—a comparative study of performance with ilmenite and a manganese oxide as catalysts. Biomass Conversion and Biorefinery, 2012, 2, 245-252.	2.9	7
208	Use of Nickel Oxide as a Catalyst for Tar Elimination in a Chemical-Looping Reforming Reactor Operated with Biomass Producer Gas. Industrial & Engineering Chemistry Research, 2012, 51, 16610-16616.	1.8	35
209	Catalytic Activity of Ni-Based Oxygen-Carriers for Steam Methane Reforming in Chemical-Looping Processes. Energy & Fuels, 2012, 26, 791-800.	2.5	89
210	Design strategy for a Chemical Looping Combustion system using process simulation and Computational Fluid Dynamics. Progress in Computational Fluid Dynamics, 2012, 12, 80.	0.1	3
211	Computational Fluid Dynamic Simulation Based Cluster Structures-Dependent Drag Coefficient Model in Dual Circulating Fluidized Beds of Chemical Looping Combustion. Industrial & Engineering Chemistry Research, 2012, 51, 1396-1412.	1.8	19
212	Coal-Direct Chemical Looping Gasification for Hydrogen Production: Reactor Modeling and Process Simulation. Energy & Fuels, 2012, 26, 3680-3690.	2.5	114
213	Analysis of Reactivity of a CuO-Based Oxygen Carrier for Chemical Looping Combustion of Coal. Energy & Fuels, 2012, 26, 3275-3283.	2.5	20
214	Evaluation of CuAl ₂ O ₄ as an Oxygen Carrier in Chemical-Looping Combustion. Industrial & Engineering Chemistry Research, 2012, 51, 13924-13934.	1.8	73
215	Advanced Exergoenvironmental Analysis of a Near-Zero Emission Power Plant with Chemical Looping Combustion. Environmental Science & Technology, 2012, 46, 3001-3007.	4.6	30
216	Oxygen Release and Oxidation Rates of MgAl ₂ O ₄ -Supported CuO Oxygen Carrier for Chemical-Looping Combustion with Oxygen Uncoupling (CLOU). Energy & Fuels, 2012, 26, 6528-6539.	2.5	75
217	Experimental Study of Natural Cu Ore Particles as Oxygen Carriers in Chemical Looping with Oxygen Uncoupling (CLOU). Energy & Fuels, 2012, 26, 3919-3927.	2.5	66
218	Development of Sinter-Resistant Core–Shell LaMn _{<i>x</i>} Fe _{1–<i>x</i>} O ₃ @mSiO ₂ Oxygen Carriers for Chemical Looping Combustion. Energy & Fuels, 2012, 26, 3091-3102.	2.5	47
219	Deep reduction behavior of iron oxide and its effect on direct CO oxidation. Applied Surface Science, 2012, 258, 2562-2569.	3.1	34

ARTICLE IF CITATIONS Synergetic effect of ZrO2 on the oxidationâ€"reduction reaction of Fe2O3 during chemical looping 220 3.1 35 combustion. Applied Surface Science, 2012, 258, 10022-10027. Experimental investigation of CLC coal combustion with nickel based particles in a fluidized bed. Fuel, 221 3.4 2012, 101, 205-214. Chemical looping processes for CO2 capture and carbonaceous fuel conversion – prospect and 222 15.6 319 opportunity. Energy and Environmental Science, 2012, 5, 7254. Chemical-looping combustion and chemical-looping reforming of kerosene in a circulating fluidized-bed 300W laboratory reactor. International Journal of Greenhouse Gas Control, 2012, 9, 1-9. Pressurized chemical-looping combustion of coal using an iron ore as oxygen carrier in a pilot-scale 224 2.3 130 unit. International Journal of Greenhouse Gas Control, 2012, 10, 363-373. Modeling of the carbonation behavior of a calcium based sorbent for CO2 capture. International Journal of Greenhouse Gas Control, 2012, 10, 510-519. 2.3 Experimental evaluation and modeling of steam gasification and hydrogen inhibition in 226 Chemical-Looping Combustion with solid fuel. International Journal of Greenhouse Gas Control, 2012, 2.324 11, 1-10. Chemical-looping combustion and chemical-looping with oxygen uncoupling of kerosene with Mnand Cu-based oxygen carriers in a circulating fluidized-bed 300W laboratory reactor. Fuel Processing Technology, 2012, 104, 378-389. 3.7 228 Chemical Looping Combustion., 2012, , 1623-1654. 1 Reactivity and Stability of a New Fe-Based Oxygen Carrier for Chemical-Looping Combustion. Advanced 229 Materials Research, 0, 616-618, 1680-1683. Interaction of Iron Oxide with Alumina in a Composite Oxygen Carrier during the Production of 230 2.5 96 Hydrogen by Chemical Looping. Energy & amp; Fuels, 2012, 26, 603-617. Environmental sustainability and climate change mitigationâ€"CCS technology, better having it than 1.3 not having it at all!. Environmental Progress and Sustainable Energy, 2012, 31, 642-649. Investigation of solid mixing mechanisms in a bubbling fluidized bed using a DEMâ€"CFD approach. 232 0.8 14 Asia-Pacific Journal of Chemical Engineering, 2012, 7, S237. Development and Testing of an Interconnected Fluidizedâ€Bed System for Chemical Looping Combustion. Chemical Engineering and Technology, 2012, 35, 532-538. Chemical Looping Dry Reforming as Novel, Intensified Process for CO₂ Activation. 234 0.9 94 Chemical Engineering and Technology, 2012, 35, 1281-1290. Manganese oxide as catalyst for tar cleaning of biomass-derived gas. Biomass Conversion and Biorefinery, 2012, 2, 133-140. Reduction and oxidation kinetics of nickel-based oxygen-carriers for chemical-looping combustion 236 6.6 163 and chemical-looping reforming. Chemical Engineering Journal, 2012, 188, 142-154. Relevance of the coal rank on the performance of the in situ gasification chemical-looping 6.6 combustion. Chemical Engineering Journal, 2012, 195-196, 91-102.

#	Article	IF	CITATIONS
238	Behavior of ilmenite as oxygen carrier in chemical-looping combustion. Fuel Processing Technology, 2012, 94, 101-112.	3.7	210
239	H2 production with CO2 capture by sorption enhanced chemical-looping reforming using NiO as oxygen carrier and CaO as CO2 sorbent. Fuel Processing Technology, 2012, 96, 27-36.	3.7	131
240	Continuous hydrogen production via the steam–iron reaction by chemical looping in a circulating fluidized-bed reactor. International Journal of Hydrogen Energy, 2012, 37, 4843-4854.	3.8	119
241	Nitrogen transfer of fuel-N in chemical looping combustion. Combustion and Flame, 2012, 159, 1286-1295.	2.8	72
242	Reactivity study on oxygen carriers for solar-hybrid chemical-looping combustion of di-methyl ether. Combustion and Flame, 2012, 159, 1806-1813.	2.8	9
243	Progress in Chemical-Looping Combustion and Reforming technologies. Progress in Energy and Combustion Science, 2012, 38, 215-282.	15.8	1,865
244	Oxy-fuel combustion of pulverized coal: Characterization, fundamentals, stabilization and CFD modeling. Progress in Energy and Combustion Science, 2012, 38, 156-214.	15.8	810
245	An experimental investigation of L-valve operation in an interconnected circulating fluidized bed system. Powder Technology, 2012, 221, 236-244.	2.1	22
246	Designing and operating a cold-flow model of a 100kW chemical-looping combustor. Powder Technology, 2012, 222, 182-192.	2.1	70
247	200-MW chemical looping combustion based thermal power plant for clean power generation. International Journal of Energy Research, 2013, 37, 49-58.	2.2	14
248	Enhanced Performance of Alkali Metal Doped Fe ₂ O ₃ and Fe ₂ O ₃ /Al ₂ O ₃ Composites As Oxygen Carrier Material in Chemical Looping Combustion. Energy & Fuels, 2013, 27, 4977-4983.	2.5	58
249	Comparative analysis of subgrid drag modifications for dense gasâ€particle flows in bubbling fluidized beds. AICHE Journal, 2013, 59, 4077-4099.	1.8	105
250	Enhancement of Hydrogen Production and Carbon Dioxide Capturing in a Novel Methane Steam Reformer Coupled with Chemical Looping Combustion and Assisted by Hydrogen Perm-Selective Membranes. Energy & Fuels, 2013, 27, 5359-5372.	2.5	34
251	Effect of ringâ€ŧype internals on solids distribution in a dual circulating fluidized bed system—cold flow model study. AICHE Journal, 2013, 59, 3612-3623.	1.8	27
252	ZrO2-Supported CuO Oxygen Carriers for Chemical-Looping with Oxygen Uncoupling (CLOU). Energy Procedia, 2013, 37, 550-559.	1.8	14
253	Theoretical study of oxidation–reduction reaction of Fe2O3 supported on MgO during chemical looping combustion. Applied Surface Science, 2013, 266, 350-354.	3.1	35
254	Opportunities and challenges in carbon dioxide capture. Journal of CO2 Utilization, 2013, 1, 69-87.	3.3	379
255	Using an oxygen-carrier as bed material for combustion of biomass in a 12-MWth circulating fluidized-bed boiler. Fuel, 2013, 113, 300-309.	3.4	108

#	Article	IF	CITATIONS
256	Model-based evaluation of a chemical looping combustion plant for energy generation at a pre-commercial scale of 100MWth. Energy Conversion and Management, 2013, 76, 323-331.	4.4	29
257	Experimental Demonstration of a Novel Gas Switching Combustion Reactor for Power Production with Integrated CO ₂ Capture. Industrial & Engineering Chemistry Research, 2013, 52, 14241-14250.	1.8	44
258	Characteristics and CLOU Performance of a Novel SiO ₂ -Supported Oxygen Carrier Prepared from CuO and β-SiC. Energy & Fuels, 2013, 27, 6040-6047.	2.5	20
259	Chemical Looping for Pre-combustion CO2 Capture — Performance and Cost Analysis. Energy Procedia, 2013, 37, 618-625.	1.8	21
260	Continuous Test of Ilmenite-Based Oxygen Carriers for Chemical Looping Combustion in a Dual Fluidized Bed Reactor System. Industrial & Engineering Chemistry Research, 2013, 52, 14817-14827.	1.8	32
261	Heterogeneous modeling of chemical-looping combustion. Part 1: Reactor model. Chemical Engineering Science, 2013, 104, 233-249.	1.9	62
262	Review of recent advances in carbon dioxide separation and capture. RSC Advances, 2013, 3, 22739.	1.7	632
263	Chemical looping combustion (CLC). , 2013, , 895-930.		17
264	Modeling of a Chemical Looping Combustion Process in Interconnected Fluidized Beds with a Cuâ€Based Oxygen Carrier. Chemical Engineering and Technology, 2013, 36, 1503-1510.	0.9	5
265	A hybrid solar and chemical looping combustion system for solar thermal energy storage. Applied Energy, 2013, 103, 671-678.	5.1	63
266	New fabrication of mixed oxygen carrier for CLC: Sludge and scale from a power plant. Fuel, 2013, 111, 496-504.	3.4	7
267	Performance of coal fly-ash based oxygen carrier for the chemical looping combustion of synthesis gas. Applied Energy, 2013, 109, 44-50.	5.1	24
268	Synergetic effects of mixed copper–iron oxides oxygen carriers in chemical looping combustion. Fuel, 2013, 108, 319-333.	3.4	110
269	Model-based analysis of bench-scale fixed-bed units for chemical-looping combustion. Chemical Engineering Journal, 2013, 233, 331-348.	6.6	44
270	The influence of high intensity solar radiation on the temperature and reduction of an oxygen carrier particle in hybrid chemical looping combustion. Chemical Engineering Science, 2013, 95, 331-342.	1.9	18
271	One-dimensional modelling of chemical looping combustion in dual fluidized bed reactor system. International Journal of Greenhouse Gas Control, 2013, 16, 72-82.	2.3	33
272	Experiment and rate equation modeling of Fe oxidation kinetics in chemical looping combustion. Combustion and Flame, 2013, 160, 808-817.	2.8	31
273	Chemical-looping combustion of solid fuels – Design and operation of a 100 kW unit with bituminous coal. International Journal of Greenhouse Gas Control, 2013, 15, 150-162.	2.3	182

#	Article	IF	CITATIONS
274	The synergetic effect of metal oxide support on Fe2O3 for chemical looping combustion: A theoretical study. Applied Surface Science, 2013, 282, 718-723.	3.1	44
275	Solids residence time distribution in the secondary reactor of a dual circulating fluidized bed system. Chemical Engineering Science, 2013, 104, 269-284.	1.9	19
276	Chemical looping gasification of solid fuels using bimetallic oxygen carrier particles – Feasibility assessment and process simulations. International Journal of Hydrogen Energy, 2013, 38, 7839-7854.	3.8	46
277	Evaluation of the use of different coals in Chemical Looping Combustion using a bauxite waste as oxygen carrier. Fuel, 2013, 106, 814-826.	3.4	67
278	Acceleration of coupled granular flow and fluid flow simulations in pebble bed energy systems. Nuclear Engineering and Design, 2013, 258, 275-283.	0.8	18
279	Analytical model of gas conversion in a 100kW chemical-looping combustor for solid fuels—Comparison with operational results. Chemical Engineering Science, 2013, 96, 131-141.	1.9	32
280	Oxygen carrier dispersion in inert packed beds to improve performance in chemical looping combustion. Chemical Engineering Journal, 2013, 234, 464-474.	6.6	11
281	Chemical-Looping Combustion of Solid Fuels — Operational Experiences in 100kW Dual Circulating Fluidized Bed System. Energy Procedia, 2013, 37, 608-617.	1.8	9
282	Innovative Oxygen Carrier Materials for Chemical-Looping Combustion. Energy Procedia, 2013, 37, 645-653.	1.8	28
283	CFD modeling to study fluidized bed combustion and gasification. Applied Thermal Engineering, 2013, 52, 585-614.	3.0	177
284	On the highâ€gasification rate of Brazilian manganese ore in chemicalâ€looping combustion (CLC) for solid fuels. AICHE Journal, 2013, 59, 4346-4354.	1.8	26
285	A high performance oxygen storage material for chemical looping processes with CO ₂ capture. Energy and Environmental Science, 2013, 6, 288-298.	15.6	112
286	Reduction Kinetics of Perovskite-Based Oxygen Carriers for Chemical Looping Combustion. Industrial & Engineering Chemistry Research, 2013, 52, 6946-6955.	1.8	25
287	Performance of Hematite/Ca2Al2SiO7 Oxygen Carrier in Chemical Looping Combustion of Coal. Industrial & Engineering Chemistry Research, 2013, 52, 7350-7361.	1.8	15
288	The thermodynamic method for selecting oxygen carriers used for chemical looping air separation. Journal of Thermal Analysis and Calorimetry, 2013, 112, 747-753.	2.0	62
289	Methane Steam Reforming Thermally Coupled with Fuel Combustion: Application of Chemical Looping Concept as a Novel Technology. Energy & Fuels, 2013, 27, 2351-2362.	2.5	55
290	Evaluation of hematite oxygen carrier in chemical-looping combustion of coal. Fuel, 2013, 104, 244-252.	3.4	111
291	Hydrodynamical model and experimental results of a calcium looping cycle for CO2 capture. Applied Energy, 2013, 101, 317-322.	5.1	42

#	Article	IF	CITATIONS
292	Combined Cu/Mn Oxides as an Oxygen Carrier in Chemical Looping with Oxygen Uncoupling (CLOU). Energy & Fuels, 2013, 27, 6031-6039.	2.5	40
293	Reducible Supports for Ni-based Oxygen Carriers in Chemical Looping Combustion. Energy & Fuels, 2013, 27, 2073-2084.	2.5	57
294	Rotary Bed Reactor for Chemical-Looping Combustion with Carbon Capture. Part 2: Base Case and Sensitivity Analysis. Energy & Fuels, 2013, 27, 344-359.	2.5	21
295	Chemical Looping Combustion and Chemical Looping with Oxygen Uncoupling Experiments in a Batch Reactor Using Spray-Dried CaMn _{1–<i>x</i>} M _{<i>x</i>} O _{3â^î} (M = Ti,)	Tj E Z Qq1 1	0. 98 4314
296	Promoting the Reduction Reactivity of Ilmenite by Introducing Foreign Ions in Chemical Looping Combustion. Industrial & Engineering Chemistry Research, 2013, 52, 6119-6128.	1.8	112
297	Reduction Kinetics of Cu-Based Oxygen Carriers for Chemical Looping Air Separation. Energy & Fuels, 2013, 27, 5466-5474.	2.5	60
298	Mechanism of Methane Chemical Looping Combustion with Hematite Promoted with CeO ₂ . Energy & Fuels, 2013, 27, 4087-4096.	2.5	48
299	Three Dimensional Modeling of a Coal-Fired Chemical Looping Combustion Process in the Circulating Fluidized Bed Fuel Reactor. Energy & Fuels, 2013, 27, 2173-2184.	2.5	46
300	Experimental Investigation on Flow Behaviors in a Novel In Situ Gasification Chemical Looping Combustion Apparatus. Industrial & Engineering Chemistry Research, 2013, 52, 14208-14218.	1.8	14
301	Ca _{<i>x</i>} La _{1–<i>x</i>} Mn _{1–<i>y</i>} M _{1–<i>y</i>} M _{Casub (M = Mg, Ti, Fe, or Cu) as Oxygen Carriers for Chemical-Looping with Oxygen Uncoupling (CLOU). Energy & Fuels, 2013, 27, 4097-4107.}	>3â^'δ2.5	b> 54
302	Investigation of Different Mn–Fe Oxides as Oxygen Carrier for Chemical-Looping with Oxygen Uncoupling (CLOU). Energy & Fuels, 2013, 27, 367-377.	2.5	116
303	Mechanism Investigation of Enhancing Reaction Performance with CaSO ₄ /Fe ₂ O ₃ Oxygen Carrier in Chemical-Looping Combustion of Coal. Industrial & Engineering Chemistry Research, 2013, 52, 4059-4071.	1.8	33
304	Low-Temperature Chemical Looping Combustion for Removing Unburnt Gaseous Components with a Cement-Supported CuO Oxygen Carrier. Energy & Fuels, 2013, 27, 6872-6879.	2.5	7
305	Investigation of Combined Supports for Cu-Based Oxygen Carriers for Chemical-Looping with Oxygen Uncoupling (CLOU). Energy & Fuels, 2013, 27, 3918-3927.	2.5	65
306	Examination of Perovskite Structure CaMnO _{3-<i>δ</i>} with MgO Addition as Oxygen Carrier for Chemical Looping with Oxygen Uncoupling Using Methane and Syngas. International Journal of Chemical Engineering, 2013, 2013, 1-16.	1.4	29
307	Theoretical Study on Reactivity of Cu-Based Oxygen Carrier for CO Chemical Looping Combustion. Advanced Materials Research, 2013, 805-806, 1336-1339.	0.3	0
308	Theoretical Study on Reactivity of Fe-Based Oxygen Carrier with CH ₄ during Chemical Looping Combustion. Applied Mechanics and Materials, 0, 345, 298-301.	0.2	3
309	Thermoneutral Design Aspects of Gasoline Chemical Looping Reformer. Fuel Cells, 2013, 13, 971-986.	1.5	0

Сп	ION	REPO	דאר
<u> </u>		TYPE I V	

#	Article	IF	CITATIONS
310	Mechanisms of Solid Fuel Conversion by Chemical‣ooping Combustion (CLC) using Manganese Ore: Catalytic Gasification by Potassium Compounds. Energy Technology, 2013, 1, 273-282.	1.8	42
311	Chemical Looping Combustion of Methane: A Technology Development View. Journal of Energy, 2013, 2013, 1-15.	1.4	4
312	Materials for Chemical-Looping with Oxygen Uncoupling. ISRN Chemical Engineering, 2013, 2013, 1-19.	1.2	108
313	Gasification Coupled Chemical Looping Combustion of Coal: A Thermodynamic Process Design Study. ISRN Chemical Engineering, 2013, 2013, 1-11.	1.2	0
314	Technical and Economic Analysis of Chemical Looping Combustion with Humid Air Turbine Power Cycle. Computer Aided Chemical Engineering, 2014, 33, 1123-1128.	0.3	0
315	Process and Reactor Level Simulations of Coal-Direct Chemical-looping Combustion. , 2014, , 329-362.		0
316	Comparison of Chemical-Looping with Oxygen Uncoupling and Chemical-Looping Combustion Technology Reaction Mechanism. Advanced Materials Research, 0, 955-959, 2261-2266.	0.3	0
317	Preparation of Large Granular Cu-Based Oxygen Carriers by Mechanical Mixing for Packed Bed Chemical-Looping Combustion. Energy & amp; Fuels, 2014, 28, 7662-7671.	2.5	3
318	Sulfur Tolerance and Rate of Oxygen Release of Combined Mn–Si Oxygen Carriers in Chemical-Looping with Oxygen Uncoupling (CLOU). Industrial & Engineering Chemistry Research, 2014, 53, 19488-19497.	1.8	14
319	Chemical-looping combustion - an overview and application of the recirculating fluidized bed reactor for improvement. International Journal of Energy Research, 2014, 38, 1331-1350.	2.2	17
320	On a Highly Reactive Fe ₂ O ₃ /Al ₂ O ₃ Oxygen Carrier for <i>in Situ</i> Gasification Chemical Looping Combustion. Energy & Fuels, 2014, 28, 7043-7052.	2.5	37
321	Cu-Modified Manganese Ore as an Oxygen Carrier for Chemical Looping Combustion. Energy & Fuels, 2014, 28, 7085-7092.	2.5	41
322	Three-dimensional CFD simulation of hydrodynamics in an interconnected fluidized bed for chemical looping combustion. Powder Technology, 2014, 268, 316-328.	2.1	70
323	Study on fluidization of 0.5 µm ultrafine and 8.0 µm superfine Geldart-C powders in a binary mixture circulating fluidized bed. International Journal of Energy Research, 2014, 38, 683-688.	2.2	1
324	Feasibility of a Co Oxygen Carrier for Chemical Looping Air Separation: Thermodynamics and Kinetics. Chemical Engineering and Technology, 2014, 37, 1500-1506.	0.9	22
325	Material balances of carbon, sulfur, nitrogen and ilmenite in a 100kW CLC reactor system. International Journal of Greenhouse Gas Control, 2014, 27, 188-202.	2.3	65
326	Design of a rotary reactor for chemical-looping combustion. Part 2: Comparison of copper-, nickel-, and iron-based oxygen carriers. Fuel, 2014, 121, 344-360.	3.4	29
327	Development of copper impregnated porous granulates for chemical-looping combustion. Fuel, 2014, 119, 323-327.	3.4	6

#	Article	IF	CITATIONS
328	A hybrid solar chemical looping combustion system with a high solar share. Applied Energy, 2014, 126, 69-77.	5.1	33
329	Measurement and modeling of decomposition kinetics for copper oxide-based chemical looping with oxygen uncoupling. Applied Energy, 2014, 116, 416-423.	5.1	66
330	Influence of ring-type internals on the solids residence time distribution in the fuel reactor of a dual circulating fluidized bed system for chemical looping combustion. Chemical Engineering Research and Design, 2014, 92, 1107-1118.	2.7	36
331	A comparative process study of chemical-looping combustion (CLC) and chemical-looping with oxygen uncoupling (CLOU) for solid fuels. International Journal of Greenhouse Gas Control, 2014, 22, 237-243.	2.3	31
332	Measuring attrition resistance of oxygen carrier particles for chemical looping combustion with a customized jet cup. Powder Technology, 2014, 256, 75-86.	2.1	143
333	Interaction of mineral matter of coal with oxygen carriers in chemical-looping combustion (CLC). Chemical Engineering Research and Design, 2014, 92, 1753-1770.	2.7	47
334	CLC in packed beds using syngas and CuO/Al2O3: Model description and experimental validation. Applied Energy, 2014, 119, 163-172.	5.1	48
335	Investigation of different manganese ores as oxygen carriers in chemical-looping combustion (CLC) for solid fuels. Applied Energy, 2014, 113, 1883-1894.	5.1	124
336	CFD model for the simulation of chemical looping combustion. Powder Technology, 2014, 265, 47-53.	2.1	87
337	Experimental comparison of two different ilmenites in fluidized bed and fixed bed chemical-looping combustion. Applied Energy, 2014, 113, 1902-1908.	5.1	29
338	Filtered and heterogeneityâ€based subgrid modifications for gas–solid drag and solid stresses in bubbling fluidized beds. AICHE Journal, 2014, 60, 839-854.	1.8	124
339	Methane dry reformer by application of chemical looping combustion via Mn-based oxygen carrier for heat supplying and carbon dioxide providing. Chemical Engineering and Processing: Process Intensification, 2014, 79, 69-79.	1.8	8
340	Design of a rotary reactor for chemical-looping combustion. Part 1: Fundamentals and design methodology. Fuel, 2014, 121, 327-343.	3.4	41
341	CFD studies of dual circulating fluidized bed reactors for chemical looping combustion processes. Chemical Engineering Journal, 2014, 236, 121-130.	6.6	102
342	Kinetics of Iron Ore Reduction by Methane for Chemical Looping Combustion. Energy & Fuels, 2014, 28, 1387-1395.	2.5	48
343	Chemical-looping combustion of solid fuels – Status of development. Applied Energy, 2014, 113, 1869-1873.	5.1	336
344	Carbon capture and storage update. Energy and Environmental Science, 2014, 7, 130-189.	15.6	1,765
345	Kinetic determination of a highly reactive impregnated Fe2O3/Al2O3 oxygen carrier for use in gas-fueled Chemical Looping Combustion. Chemical Engineering Journal, 2014, 258, 265-280.	6.6	103

#	Article	IF	CITATIONS
346	Cold model testing of a re•irculating fluidised bed reactor working in alternate aeration— fuel burning cycles for chemical looping. Canadian Journal of Chemical Engineering, 2014, 92, 156-167.	0.9	5
347	Spent Isopropanol Solution as Possible Liquid Fuel for Moving Bed Reactor in Chemical Looping Combustion. Energy & Fuels, 2014, 28, 657-665.	2.5	12
348	Using Ilmenite To Reduce the Tar Yield in a Dual Fluidized Bed Gasification System. Energy & Fuels, 2014, 28, 2632-2644.	2.5	60
349	Mn–Fe Oxides with Support of MgAl ₂ O ₄ , CeO ₂ , ZrO ₂ and Y ₂ O ₃ –ZrO ₂ for Chemical-Looping Combustion and Chemical-Looping with Oxygen Uncoupling. Industrial & Engineering Chemistry Research, 2014, 53, 10358-10365.	1.8	44
350	Conceptual design of a Ni-based chemical looping combustion process using fixed-beds. Applied Energy, 2014, 135, 309-319.	5.1	39
351	CaZrO3 and SrZrO3-based CuO Oxygen Carriers for Chemical-looping with Oxygen Uncoupling (CLOU). Energy Procedia, 2014, 51, 75-84.	1.8	10
352	(Fe1-xMnx)TiyO3 based Oxygen Carriers for Chemical-looping Combustion and Chemical-looping with Oxygen Uncoupling. Energy Procedia, 2014, 51, 85-98.	1.8	21
353	CuO-Based Oxygen-Carrier Particles for Chemical-Looping with Oxygen Uncoupling – Experiments in Batch Reactor and in Continuous Operation. Industrial & Engineering Chemistry Research, 2014, 53, 6255-6267.	1.8	54
354	Online Measurement of Elemental Yields, Oxygen Transport, Condensable Compounds, and Heating Values in Gasification Systems. Energy & Fuels, 2014, 28, 5892-5901.	2.5	27
355	Fe ₂ O ₃ @La _{<i>x</i>} Sr _{1â^'<i>x</i>} FeO ₃ Core–Shell Redox Catalyst for Methane Partial Oxidation. ChemCatChem, 2014, 6, 790-799.	1.8	108
356	Numerical Simulation of Hydrogen Production via Chemical Looping Reforming in Interconnected Fluidized Bed Reactor. Industrial & Engineering Chemistry Research, 2014, 53, 4182-4191.	1.8	17
357	Sulfur Tolerance of Ca _{<i>x</i>} Mn _{1–<i>y</i>} M _{<i>y</i>} O _{3â^îî} (M = Mg, Ti) Perovskite-Type Oxygen Carriers in Chemical-Looping with Oxygen Uncoupling (CLOU). Energy & Fuels. 2014. 28. 1312-1324.	2.5	37
358	Chemical-Looping Combustion with Fuel Oil in a 10 kW Pilot Plant. Energy & Fuels, 2014, 28, 5978-5987.	2.5	37
359	Oxidation Kinetics of Cu ₂ O in Oxygen Carriers for Chemical Looping with Oxygen Uncoupling. Industrial & Engineering Chemistry Research, 2014, 53, 2976-2986.	1.8	43
360	Aspen Plus simulations of fluidised beds for chemical looping combustion. Fuel, 2014, 136, 46-56.	3.4	28
361	An overview of current status of carbon dioxide capture and storage technologies. Renewable and Sustainable Energy Reviews, 2014, 39, 426-443.	8.2	2,253
362	Influence of the Type of Oxygen Carriers on the Performance of a Hybrid Solar Chemical Looping Combustion System. Energy & Fuels, 2014, 28, 2914-2924.	2.5	20
363	Mass, energy, and exergy balance analysis of chemical looping with oxygen uncoupling (CLOU) process. Energy Conversion and Management, 2014, 87, 483-494.	4.4	30

#	Article	IF	CITATIONS
364	Transient Simulations of Spouted Fluidized Bed for Coal-Direct Chemical Looping Combustion. Energy & Fuels, 2014, 28, 1548-1560.	2.5	27
365	Copper-Decorated Hematite as an Oxygen Carrier for in Situ Gasification Chemical Looping Combustion of Coal. Energy & Fuels, 2014, 28, 3970-3981.	2.5	74
366	Chemical-looping gasification of biomass in a 10 kWth interconnected fluidized bed reactor using Fe2O3/Al2O3 oxygen carrier. Journal of Fuel Chemistry and Technology, 2014, 42, 922-931.	0.9	65
367	Analysis of reduction stage of chemical looping packed bed reactor based on the reaction front distribution. Journal of Material Cycles and Waste Management, 2014, 16, 583-590.	1.6	8
368	Experimental Study of Chemical-Looping Reforming in a Fixed-Bed Reactor: Performance Investigation of Different Oxygen Carriers on Al ₂ O ₃ and TiO ₂ Support. Energy & Fuels, 2014, 28, 2811-2820.	2.5	48
369	Influence of porous substrate on copper based oxygen carrier efficiency for chemical-looping combustion. Microporous and Mesoporous Materials, 2014, 190, 362-370.	2.2	8
370	Chemical-Looping Combustion With Gaseous Fuels: Thermodynamic Parametric Modeling. Arabian Journal for Science and Engineering, 2014, 39, 3415-3421.	1.1	5
371	Examination of oxygen uncoupling behaviour and reactivity towards methane for manganese silicate oxygen carriers in chemical-looping combustion. International Journal of Greenhouse Gas Control, 2014, 29, 70-81.	2.3	35
372	Density functional theory study on the interaction of CO with the Fe3O4(001) surface. Applied Surface Science, 2014, 317, 752-759.	3.1	28
373	Interaction between iron-based oxygen carrier and four coal ashes during chemical looping combustion. Applied Energy, 2014, 115, 549-558.	5.1	80
374	Experimental investigations on temperature variation and inhomogeneity in a packed bed CLC reactor of large particles and low aspect ratio. Chemical Engineering Science, 2014, 107, 266-276.	1.9	26
375	Operation of a 100 kW chemical-looping combustor with Mexican petroleum coke and Cerrejón coal. Applied Energy, 2014, 113, 1830-1835.	5.1	82
376	Techno-economic analysis of chemical looping combustion with humid air turbine power cycle. Fuel, 2014, 124, 221-231.	3.4	44
377	The combustion of a fuel-rich mixture of methane and air in a bubbling fluidised bed of silica sand at 700ŰC and also with particles of Fe2O3 or Fe present. Fuel, 2014, 127, 169-177.	3.4	25
378	In situ gasification chemical looping combustion of a coal using the binary oxygen carrier natural anhydrite ore and natural iron ore. Energy Conversion and Management, 2014, 83, 270-283.	4.4	45
379	Investigation of Manganese–Iron Oxide Materials based on Manganese Ores as Oxygen Carriers for Chemical Looping with Oxygen Uncoupling (CLOU). Energy Technology, 2014, 2, 469-479.	1.8	16
380	Modeling of reactive gas–solid flows in riser reactors using a multi-scale chemical reaction model. Chemical Engineering Science, 2014, 116, 773-780.	1.9	11
381	Apparent kinetics derived from fluidized bed experiments for Norwegian ilmenite as oxygen carrier. Journal of Environmental Chemical Engineering, 2014, 2, 1131-1141.	3.3	18

#	Article	IF	CITATIONS
382	CO2-gasification of a lignite coal in the presence of an iron-based oxygen carrier for chemical-looping combustion. Fuel, 2014, 127, 186-201.	3.4	61
383	Overview of Chemical-Looping Reduction in Fixed Bed and Fluidized Bed Reactors Focused on Oxygen Carrier Utilization and Reactor Efficiency. Aerosol and Air Quality Research, 2014, 14, 559-571.	0.9	32
384	Transient Simulations of Spouted Fluidized Bed for Coal-Direct Chemical Looping Combustion. , 2014, ,		0
385	Chemicalâ€Looping Reforming of Methane Using Iron Based Oxygen Carrier Modified with Low Content Nickel. Chinese Journal of Chemistry, 2014, 32, 1271-1280.	2.6	19
386	Chemical-looping Combustion of Solid Fuels – Technology Overview and Recent Operational Results in 100 kW Unit. Energy Procedia, 2014, 63, 98-112.	1.8	34
387	Oxidation of Ammonia by Ilmenite under Conditions Relevant to Chemical-Looping Combustion. Energy & Fuels, 2015, 29, 8126-8134.	2.5	14
391	Performance of cement decorated copper ore as oxygen carrier in chemical-looping with oxygen uncoupling. International Journal of Greenhouse Gas Control, 2015, 41, 210-218.	2.3	43
392	Experimental Study of a Carbon Stripper in Solid Fuel Chemical Looping Combustion. Industrial & Engineering Chemistry Research, 2015, 54, 8743-8753.	1.8	29
393	Conversion of Condensable Hydrocarbons in a Dual Fluidized Bed Biomass Gasifier. Energy & Fuels, 2015, 29, 6465-6475.	2.5	22
394	Experimental and numerical investigation of the dynamics of loop seals in a largeâ€scale DFB system under hot conditions. AICHE Journal, 2015, 61, 3580-3593.	1.8	8
396	Screening of Combined Mn-Fe-Si Oxygen Carriers for Chemical Looping with Oxygen Uncoupling (CLOU). Energy & Fuels, 2015, 29, 1868-1880.	2.5	19
397	Self-assembly template combustion synthesis of a core–shell CuO@TiO2–Al2O3 hierarchical structure as an oxygen carrier for the chemical-looping processes. Combustion and Flame, 2015, 162, 3030-3045.	2.8	53
398	Nanoparticle prepared mechanically stable hierarchically porous silica granulates and their application as oxygen carrier supports for chemical looping combustion. Journal of Materials Chemistry A, 2015, 3, 11863-11873.	5.2	8
399	Study of a Cu-Based Oxygen Carrier Based on a Chemical Looping Combustion Process. Energy & Fuels, 2015, 29, 3933-3943.	2.5	7
400	Emerging CO2 capture systems. International Journal of Greenhouse Gas Control, 2015, 40, 126-166.	2.3	352
401	Characterization of a sol–gel derived CuO/CuAl2O4 oxygen carrier for chemical looping combustion (CLC) of gaseous fuels: Relevance of gas–solid and oxygen uncoupling reactions. Fuel Processing Technology, 2015, 133, 210-219.	3.7	49
402	Characteristics of a CaSO ₄ oxygen carrier for chemical-looping combustion: reaction with polyvinylchloride pyrolysis gases in a two-stage reactor. RSC Advances, 2015, 5, 34913-34920.	1.7	22
403	Performance and kinetics of iron-based oxygen carriers reduced by carbon monoxide for chemical looping combustion. Frontiers of Environmental Science and Engineering, 2015, 9, 1130-1138.	3.3	11

#	Article	IF	CITATIONS
404	Methane partial oxidation using FeO _x @La _{0.8} Sr _{0.2} FeO _{3â^îî} core–shell catalyst – transient pulse studies. Physical Chemistry Chemical Physics, 2015, 17, 31297-31307.	1.3	75
405	Efficient cycles for carbon capture CLC power plants based on thermally balanced redox reactors. International Journal of Greenhouse Gas Control, 2015, 41, 302-315.	2.3	9
406	Performance of Fe–Ni bimetallic oxygen carriers for chemical looping gasification of biomass in a 10ÂkWth interconnected circulating fluidized bed reactor. International Journal of Hydrogen Energy, 2015, 40, 16021-16032.	3.8	96
407	Carbon Capture and Storageâ^—. , 2015, , 329-366.		5
408	Hydrogen production in an environmental-friendly process by application of chemical looping combustion via Ni- and Fe-Based oxygen carriers. Theoretical Foundations of Chemical Engineering, 2015, 49, 884-900.	0.2	7
409	Screening of different manganese ores for chemical-looping combustion (CLC) and chemical-looping with oxygen uncoupling (CLOU). International Journal of Greenhouse Gas Control, 2015, 43, 179-188.	2.3	70
410	Transient Reacting Flow Simulation of Spouted Fluidized Bed for Coal-Direct Chemical Looping Combustion. Journal of Thermal Science and Engineering Applications, 2015, 7, .	0.8	9
411	Synergistic effects of mixtures of iron ores and copper ores as oxygen carriers in chemical-looping combustion. Proceedings of the Combustion Institute, 2015, 35, 2811-2818.	2.4	72
412	An investigation of steam production in chemical-looping combustion (CLC) and chemical-looping with oxygen uncoupling (CLOU) for solid fuels. Chemical Engineering Research and Design, 2015, 94, 12-17.	2.7	13
413	A Novel Chemical Looping Combustion (CLC)-Assisted Catalytic Naphtha Reforming Process for Simultaneous Carbon Dioxide Capture and Hydrogen Production Enhancement. Energy & Fuels, 2015, 29, 2022-2033.	2.5	12
414	Comprehensive study of Mn–Fe–Al oxygen-carriers for chemical-looping with oxygen uncoupling (CLOU). International Journal of Greenhouse Gas Control, 2015, 34, 12-24.	2.3	34
415	Chemical looping combustion process in fixed-bed reactors using ilmenite as oxygen carrier: Conceptual design and operation strategy. Chemical Engineering Journal, 2015, 264, 797-806.	6.6	33
416	Study of the performances of an oxygen carrier: Experimental investigation of the binder's contribution and characterization of its structural modifications. Comptes Rendus Chimie, 2015, 18, 45-55.	0.2	7
417	Experimental Demonstration of Two-Stage Packed Bed Chemical-Looping Combustion Using Syngas with CuO/Al ₂ O ₃ and NiO/CaAl ₂ O ₄ as Oxygen Carriers. Industrial & Engineering Chemistry Research, 2015, 54, 2001-2011.	1.8	16
418	Possibility of Morphological Control To Improve the Activity of Oxygen Carriers for Chemical Looping Combustion. Energy & Fuels, 2015, 29, 1210-1218.	2.5	19
419	Continuous Operation of a 10 kW _{th} Chemical Looping Integrated Fluidized Bed Reactor for Gasifying Biomass Using an Iron-Based Oxygen Carrier. Energy & Fuels, 2015, 29, 233-241.	2.5	68
420	Reduction and oxidation kinetics of different phases of iron oxides. International Journal of Hydrogen Energy, 2015, 40, 2613-2620.	3.8	55
421	Simultaneous syngas production with different H2/CO ratio in a multi-tubular methane steam and dry reformer by utilizing of CLC. Journal of Energy Chemistry, 2015, 24, 54-64.	7.1	11

#	Article	IF	CITATIONS
422	CFD–DEM simulation of solid circulation rate in the cold flow model of chemical looping systems. Chemical Engineering Research and Design, 2015, 95, 262-280.	2.7	50
423	Analysis of thermally coupled chemical looping combustion-based power plants with carbon capture. International Journal of Greenhouse Gas Control, 2015, 35, 56-70.	2.3	18
424	Analysis of oxygen releasing rate of Cu-based oxygen carrier in N2–O2 atmosphere. Journal of Thermal Analysis and Calorimetry, 2015, 119, 2221-2227.	2.0	5
425	Capture of CO2 from coal using chemical-looping combustion: Process simulation. Korean Journal of Chemical Engineering, 2015, 32, 373-382.	1.2	5
426	Computational study of solid circulation in chemical-looping combustion reactor model. Powder Technology, 2015, 276, 144-155.	2.1	40
427	Progress in oxygen carrier development of methane-based chemical-looping reforming: A review. Applied Energy, 2015, 151, 143-156.	5.1	416
428	Energy and exergy analysis of chemical looping combustion technology and comparison with pre-combustion and oxy-fuel combustion technologies for CO2 capture. Journal of Environmental Chemical Engineering, 2015, 3, 2104-2114.	3.3	96
429	Multi-scale simulation of chemical looping combustion in dual circulating fluidized bed. Applied Energy, 2015, 155, 719-727.	5.1	25
430	Cement/CaO-modified iron ore as oxygen carrier for chemical looping combustion of coal. Applied Energy, 2015, 157, 314-322.	5.1	52
431	Chemical looping combustion of gaseous fuels. , 2015, , 255-285.		1
432	Optimization of in Situ Gasification Chemical Looping Combustion through Experimental Investigations with a Cold Experimental System. Industrial & Engineering Chemistry Research, 2015, 54, 5749-5758.	1.8	21
433	Fundamentals of chemical looping combustion and introduction to CLC reactorÂdesign. , 2015, , 197-219.		7
434	Chemical and calcium looping reforming for hydrogen production and carbon dioxideÂcapture. , 2015, , 469-487.		2
435	Oxygen carriers for chemical-looping combustion. , 2015, , 221-254.		15
436	Chemical looping combustion of coal in a 5 kWth interconnected fluidized bed reactor using hematite as oxygen carrier. Applied Energy, 2015, 157, 304-313.	5.1	105
437	Model-assisted analysis of fluidized bed chemical-looping reactors. Chemical Engineering Science, 2015, 134, 619-631.	1.9	16
438	A systematic investigation of the performance of copper-, cobalt-, iron-, manganese- and nickel-based oxygen carriers for chemical looping combustion technology through simulation models. Chemical	1.9	36
	Engineering Science, 2015, 130, 79-91.		

#	Article	IF	CITATIONS
440	Hydrogen from synthetic biogas via SIP using NiAl2O4 catalyst: Reduction stage. International Journal of Hydrogen Energy, 2015, 40, 5244-5250.	3.8	14
441	Viability of fuel switching of a gas-fired power plant operating in chemical looping combustion mode. Energy, 2015, 81, 213-221.	4.5	11
442	Influence of the regeneration conditions on the performances and the microstructure modifications of NiO/NiAl 2 O 4 for chemical looping combustion. Fuel, 2015, 153, 284-293.	3.4	19
443	Coal gasification integration with solid oxide fuel cell and chemical looping combustion for high-efficiency power generation with inherent CO2 capture. Applied Energy, 2015, 146, 298-312.	5.1	92
444	A Feasibility Study for Synthesis Gas Production by Considering Carbon Dioxide Capturing in an Industrial-Scale Methanol Synthesis Plant. Arabian Journal for Science and Engineering, 2015, 40, 1255-1268.	1.1	5
445	Chemical looping combustion: A new low-dioxin energy conversion technology. Journal of Environmental Sciences, 2015, 32, 135-145.	3.2	25
446	A CFD study of a bi-disperse gas–solid fluidized bed: Effect of the EMMS sub grid drag correction. Powder Technology, 2015, 280, 154-172.	2.1	33
447	Thermal and mechanical behaviour of oxygen carrier materials for chemical looping combustion in a packed bed reactor. Applied Energy, 2015, 157, 374-381.	5.1	18
448	Transient reacting flow simulation of spouted fluidized bed for coal-direct chemical looping combustion with different Fe-based oxygen carriers. Applied Energy, 2015, 160, 552-560.	5.1	55
449	Perovskite ceramics and recent experimental progress in reactor design for chemical looping combustion application. Chemical Papers, 2015, 69, .	1.0	5
450	A 1000 MWth boiler for chemical-looping combustion of solid fuels – Discussion of design and costs. Applied Energy, 2015, 157, 475-487.	5.1	210
451	Hydrodynamic characteristics in cold model of dual fluidized bed gasifiers. Powder Technology, 2015, 286, 246-256.	2.1	22
452	CFD based modeling on chemical looping combustion in a packed bed reactor. Chemical Engineering Science, 2015, 138, 303-314.	1.9	17
453	Fe–Mn based minerals with remarkable redox characteristics for chemical looping combustion. Fuel, 2015, 159, 169-178.	3.4	39
454	Process simulation of multi-stage chemical-looping combustion using Aspen Plus. Energy, 2015, 90, 1869-1877.	4.5	44
455	Screening of supported and unsupported Mn–Si oxygen carriers for CLOU (chemical-looping with) Tj ETQq1 1 ().784314 4.5	rgBT /Over
456	Integration of in-situ CO2-oxy coal gasification with advanced power generating systems performing in a chemical looping approach of clean combustion. Applied Energy, 2015, 140, 1-13.	5.1	26
457	NO release during chemical looping combustion with iron ore as an oxygen carrier. Chemical Engineering Journal, 2015, 264, 211-220.	6.6	40

# 458	ARTICLE Coupling of a radiative heat transfer model and a three-dimensional combustion model for a circulating fluidized bed furnace. Applied Thermal Engineering, 2015, 76, 344-356.	IF 3.0	CITATIONS 31
459	Prediction of formation of gas-phase bubbles correlated by vortices in the fuel reactor of chemical looping combustion. Fuel Processing Technology, 2015, 130, 235-244.	3.7	6
460	Syngas-fueled, chemical-looping combustion-based power plant lay-out for clean energy generation. Clean Technologies and Environmental Policy, 2015, 17, 237-247.	2.1	13
461	Chemical Looping Reforming: Impact on the Performances Due to Carbon Fouling on Catalyst. Computer Aided Chemical Engineering, 2016, 38, 229-234.	0.3	3
462	Evaluating the Effect of Inert Supports and Alkali Sodium on the Performance of Red Mud Oxygen Carrier in Chemical Looping Combustion. Industrial & Engineering Chemistry Research, 2016, 55, 8046-8057.	1.8	50
463	Numerical Simulation Comparison of Two Reactor Configurations for Chemical Looping Combustion and Chemical Looping With Oxygen Uncoupling. Journal of Energy Resources Technology, Transactions of the ASME, 2016, 138, .	1.4	19
464	Investigations into the effects of volatile biomass tar on the performance of Fe-based CLC oxygen carrier materials. Environmental Research Letters, 2016, 11, 115001.	2.2	20
465	Sensitivity of chemical-looping combustion to particle reaction kinetics. Chemical Engineering Science, 2016, 152, 21-25.	1.9	5
466	Investigation of Cu–Fe and Mn–Ni oxides as oxygen carriers for chemical-looping combustion. Fuel Processing Technology, 2016, 150, 30-40.	3.7	45
467	Oxygen Storage Properties of La _{1–<i>x</i>} Sr _{<i>x</i>} FeO _{3â~î^} for Chemical-Looping Reactions—An In Situ Neutron and Synchrotron X-ray Study. Chemistry of Materials, 2016, 28, 3951-3960.	3.2	57
468	Chemical-looping combustion in a reverse-flow fixed bed reactor. Energy, 2016, 102, 669-681.	4.5	31
469	Recent progress and innovation in carbon capture and storage using bioinspired materials. Applied Energy, 2016, 172, 383-397.	5.1	28
470	Techno-economic investigation of a chemical looping combustion based power plant. Faraday Discussions, 2016, 192, 437-457.	1.6	35
471	Effect of Production Parameters on the Spray-Dried Calcium Manganite Oxygen Carriers for Chemical-Looping Combustion. Energy & amp; Fuels, 2016, 30, 3257-3268.	2.5	14
472	Development of oxygen carriers for Chemical Looping Combustion: The chemical interaction between CuO and silica/γ-alumina granules with similar microstructure. Fuel, 2016, 186, 496-503.	3.4	10
473	Performance Modeling of Integrated Chemical Looping Air Separation and IGCC with CO ₂ Capture. Energy & Fuels, 2016, 30, 9953-9961.	2.5	24
474	Double-stage chemical looping combustion combined with sorption enhanced natural gas steam reforming process for hydrogen and power cogeneration: Thermodynamic investigation. Chemical Engineering Research and Design, 2016, 114, 247-257.	2.7	7
475	Dynamic optimization of fixed bed chemical-looping combustion processes. Energy, 2016, 112, 1107-1119.	4.5	39

#	Article	IF	CITATIONS
476	Dynamic optimization of fixed bed chemical-looping combustion systems integrated in thermal power plants. IFAC-PapersOnLine, 2016, 49, 115-120.	0.5	2
477	Analysis of a Twoâ€Stage Fuel Reactor System for the Chemicalâ€Looping Combustion of Lignite and Bituminous Coal. Energy Technology, 2016, 4, 1263-1273.	1.8	25
478	Concept Study for Competitive Power Generation from Chemical Looping Combustion of Natural Gas. Energy Technology, 2016, 4, 1299-1304.	1.8	15
479	Performance of Perovskiteâ€Type Oxides as Oxygenâ€Carrier Materials for Chemical Looping Combustion in the Presence of H ₂ S. Energy Technology, 2016, 4, 1305-1316.	1.8	23
480	Chemical looping as reactor concept for the oxidative coupling of methane over a Na 2 WO 4 /Mn/SiO 2 catalyst. Chemical Engineering Journal, 2016, 306, 646-654.	6.6	63
481	Investigation of a calcium manganite as oxygen carrier during 99 h of operation of chemical-looping combustion in a 10 kW th reactor unit. International Journal of Greenhouse Gas Control, 2016, 53, 222-229.	2.3	47
482	Enhanced performance of manganese ore as oxygen carrier for chemical-looping with oxygen uncoupling (CLOU) by combination with Ca(OH)2 through spray-drying. Journal of Environmental Chemical Engineering, 2016, 4, 3707-3717.	3.3	11
483	Thermal stability study of NiAl2O4 binders for Chemical Looping Combustion application. Fuel, 2016, 182, 50-56.	3.4	13
484	Recent advances in multi-layer composite polymeric membranes for CO2 separation: A review. Green Energy and Environment, 2016, 1, 102-128.	4.7	215
485	Spouted bed reactor for kinetic measurements of reduction of Fe2O3 in a CO2/CO atmosphere Part I: Atmospheric pressure measurements and equipment commissioning. Chemical Engineering Research and Design, 2016, 114, 307-320.	2.7	21
486	Influence of transition metal electronegativity on the oxygen storage capacity of perovskite oxides. Chemical Communications, 2016, 52, 10369-10372.	2.2	28
487	Development of oxygen carriers for chemical looping combustion: effects of support microstructure on the performance of oxygen carriers. Microporous and Mesoporous Materials, 2016, 232, 264-272.	2.2	6
488	A Hydrodynamic Study of a Fastâ€Bed Dual Circulating Fluidized Bed for Chemical Looping Combustion. Energy Technology, 2016, 4, 1254-1262.	1.8	7
489	Pressurized chemical looping combustion with CO: Reduction reactivity and oxygen-transport capacity of ilmenite ore. Applied Energy, 2016, 184, 132-139.	5.1	29
490	Experimental Evaluation of a Novel 20 kW _{th} in Situ Gasification Chemical Looping Combustion Unit with an Iron Ore as the Oxygen Carrier. Industrial & Engineering Chemistry Research, 2016, 55, 11775-11784.	1.8	32
491	Experimental study of oxygen transport membranes for oxy-fuel combustion reactors. Journal of Fluid Science and Technology, 2016, 11, JFST0025-JFST0025.	0.2	0
492	Enhancing the activation of silicon carbide tracer particles for PEPT applications using gas-phase deposition of alumina at room temperature and atmospheric pressure. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 807, 108-113.	0.7	9
493	In Situ Gasification Chemical Looping Combustion of Coal Using the Mixed Oxygen Carrier of Natural Anhydrite Ore and Calcined Limestone. International Journal of Chemical Reactor Engineering, 2016, 14, 637-652.	0.6	6

#	Article	IF	CITATIONS
494	Experimental demonstration of control strategies for a Gas Switching Combustion reactor for power production with integrated CO2 capture. Chemical Engineering Research and Design, 2016, 111, 342-352.	2.7	4
495	Qualitative numerical study of simultaneous high-C-intensified gas–solids contact, separation and segregation in a bi-disperse rotating fluidized bed in a vortex chamber. Advanced Powder Technology, 2016, 27, 1453-1463.	2.0	19
496	Packed Bed Chemical Looping Platform: Design and Operation of 30kWth Pilot Unit. Procedia Environmental Sciences, 2016, 31, 81-90.	1.3	6
497	Investigation of sintered iron ore fines as an oxygen carrier in chemical looping combustion. Journal of Thermal Analysis and Calorimetry, 2016, 125, 459-469.	2.0	4
498	Sulfur behavior in chemical-looping combustion using a copper ore oxygen carrier. Applied Energy, 2016, 166, 84-95.	5.1	39
499	Fuel reactor modelling for chemical looping combustion: From micro-scale to macro-scale. Fuel, 2016, 175, 87-98.	3.4	27
500	Present status and overview of Chemical Looping Combustion technology. Renewable and Sustainable Energy Reviews, 2016, 59, 597-619.	8.2	210
501	Enhancing properties of iron and manganese ores as oxygen carriers for chemical looping processes by dry impregnation. Applied Energy, 2016, 163, 41-50.	5.1	51
502	An Eulerian Approach to Computational Fluid Dynamics Simulation of a Chemical-Looping Combustion Reactor With Chemical Reactions. Journal of Energy Resources Technology, Transactions of the ASME, 2016, 138, .	1.4	18
503	Performance of Combined Manganese–Silicon Oxygen Carriers and Effects of Including Titanium. Energy & Fuels, 0, , .	2.5	4
504	Experimental Evaluation of a Chinese Sulfur-Containing Lean Iron Ore as the Oxygen Carrier for Chemical-Looping Combustion. Industrial & Engineering Chemistry Research, 2016, 55, 428-435.	1.8	11
505	Three-dimensional full loop simulation of solids circulation in an interconnected fluidized bed. Powder Technology, 2016, 289, 118-125.	2.1	28
506	Density Functional Theory Study of Elemental Mercury Adsorption on Fe ₂ O ₃ [104] and Its Effect on Carbon Deposit during Chemical Looping Combustion. Energy & Fuels, 2016, 30, 3413-3418.	2.5	12
507	Performance Model for Evaluating Chemical Looping Combustion (CLC) Processes for CO ₂ Capture at Gas-Fired Power Plants. Energy & Fuels, 2016, 30, 2257-2267.	2.5	10
508	Reactivity of the Fe ₂ O ₃ (0001) Surface for Methane Oxidation: A GGA + U Study. Journal of Physical Chemistry C, 2016, 120, 6642-6650.	1.5	51
509	Molecular Design of High CO ₂ Reactivity and Low Viscosity Ionic Liquids for CO ₂ Separative Facilitated Transport Membranes. Industrial & Engineering Chemistry Research, 2016, 55, 2821-2830.	1.8	25
510	Kinetic studies of the methanation of CO over a Ni/γ-Al2O3 catalyst using a batch reactor. Chemical Engineering Science, 2016, 146, 316-336.	1.9	20
511	Bulk monolithic Ce–Zr–Fe–O/Al 2 O 3 oxygen carriers for a fixed bed scheme of the chemical looping combustion: Reactivity of oxygen carrier. Applied Energy, 2016, 163, 19-31.	5.1	47

#	Article	IF	CITATIONS
512	Development of CaMn0.775Mg0.1Ti0.125O3-Ĵ´oxygen carriers produced from different Mn and Ti sources. Materials and Design, 2016, 89, 527-542.	3.3	26
513	Cold flow model of dual fluidized bed: A review. Renewable and Sustainable Energy Reviews, 2016, 53, 1529-1548.	8.2	36
514	Experimental study of copper modified manganese ores as oxygen carriers in a dual fluidized bed reactor. Applied Energy, 2016, 162, 940-947.	5.1	32
515	Kinetics of oxygen uncoupling of a copper based oxygen carrier. Applied Energy, 2016, 161, 92-100.	5.1	50
516	Combination of ionic liquids with membrane technology: A new approach for CO2 separation. Journal of Membrane Science, 2016, 497, 1-20.	4.1	439
517	CO2 capture from the calcination of CaCO3 using iron oxide asÂheatÂcarrier. Journal of Cleaner Production, 2016, 112, 1211-1217.	4.6	46
518	Dynamic flowsheet simulation of gas and solids flows in a system of coupled fluidized bed reactors for chemical looping combustion. Powder Technology, 2017, 316, 628-640.	2.1	10
519	Investigation of Two Hematites as Oxygen Carrier and Two Low-Rank Coals as Fuel in Chemical Looping Combustion. Energy & Fuels, 2017, 31, 1896-1903.	2.5	21
520	Prediction of bubble fluidisation during chemical looping combustion using CFD simulation. Computers and Chemical Engineering, 2017, 99, 82-95.	2.0	22
521	Annular Carbon Stripper for Chemical-Looping Combustion of Coal. Industrial & Engineering Chemistry Research, 2017, 56, 1580-1593.	1.8	27
522	Titanium substituted manganese-ferrite as an oxygen carrier with permanent magnetic properties for chemical looping combustion of solid fuels. Fuel, 2017, 195, 38-48.	3.4	56
523	Thermodynamic potential of high temperature chemical looping combustion with molten iron oxide as the oxygen carrier. Chemical Engineering Research and Design, 2017, 120, 69-81.	2.7	24
524	Large scale in silico screening of materials for carbon capture through chemical looping. Energy and Environmental Science, 2017, 10, 818-831.	15.6	67
525	Permselectivity Bench to Study Permation Along Porous Tube. , 2017, , .		3
526	CO ₂ Capture with Chemical Looping Combustion of Gaseous Fuels: An Overview. Energy & Fuels, 2017, 31, 3475-3524.	2.5	91
527	A reduced fidelity model for the rotary chemical looping combustion reactor. Applied Energy, 2017, 190, 725-739.	5.1	8
530	Chemical equilibrium analysis of hydrogen production from shale gas using sorption enhanced chemical looping steam reforming. Fuel Processing Technology, 2017, 159, 128-144.	3.7	45
531	Fluidized bed reactor design study for pressurized chemical looping combustion of natural gas. Powder Technology, 2017, 316, 569-577.	2.1	28

#	Article	IF	CITATIONS
532	Solvent-free, improved synthesis of pure bixbyite phase of iron and manganese mixed oxides as low-cost, potential oxygen carrier for chemical looping with oxygen uncoupling. Pure and Applied Chemistry, 2017, 89, 511-521.	0.9	9
533	Energy-saving pathway exploration of CCS integrated with solar energy: A review of innovative concepts. Renewable and Sustainable Energy Reviews, 2017, 77, 652-669.	8.2	33
534	Gaseous state oxygen carrier for coal chemical looping process. Fuel, 2017, 202, 395-404.	3.4	12
535	The relative performance of alternative oxygen carriers for liquid chemical looping combustion and gasification. International Journal of Hydrogen Energy, 2017, 42, 16396-16407.	3.8	40
536	Measurements of Decompression Wave Speed in Simulated Anthropogenic Carbon Dioxide Mixtures Containing Hydrogen. Journal of Pressure Vessel Technology, Transactions of the ASME, 2017, 139, .	0.4	2
537	Experience of more than 1000 h of operation with oxygen carriers and solid biomass at large scale. Applied Energy, 2017, 190, 1174-1183.	5.1	64
538	Thermodynamic and environmental evaluation of biomass and coal co-fuelled gasification chemical looping combustion with CO 2 capture for combined cooling, heating and power production. Applied Energy, 2017, 195, 861-876.	5.1	63
539	Co3O4 nanoparticles as oxygen carriers for chemical looping combustion: A materials characterization approach to understanding oxygen carrier performance. Chemical Engineering Journal, 2017, 319, 279-287.	6.6	64
540	Conceptual design of a Ca–Cu chemical looping process for hydrogen production in integrated steelworks. International Journal of Hydrogen Energy, 2017, 42, 11023-11037.	3.8	33
541	Uniform-Design-Based Optimization for Fuel Reactor of Chemical Looping Combustion. International Journal of Chemical Reactor Engineering, 2017, 15, .	0.6	1
542	Synthesis and characterization of geopolymer oxygen carriers for chemical looping combustion. Applied Energy, 2017, 194, 136-147.	5.1	23
543	Optimized design and operation strategy of a Ca Cu chemical looping process for hydrogen production. Chemical Engineering Science, 2017, 166, 144-160.	1.9	34
544	Fluid flow analysis to describe the permeation process along the length of the porous tube. International Journal of Hydrogen Energy, 2017, 42, 25531-25543.	3.8	4
545	Combustion Performance of Sewage Sludge in a Novel CLC System with a Two-Stage Fuel Reactor. Energy & Fuels, 2017, 31, 12570-12581.	2.5	18
546	Three-Dimensional Full Loop Modeling and Optimization of an in Situ Gasification Chemical Looping Combustion System. Energy & Fuels, 2017, 31, 13859-13870.	2.5	29
547	Performance of Industrial Residues as Low Cost Oxygen Carriers. Energy Procedia, 2017, 114, 361-370.	1.8	13
548	The Internally Circulating Reactor (ICR) Concept Applied to Pressurized Chemical Looping Processes. Energy Procedia, 2017, 114, 446-457.	1.8	7
549	Isothermal Oxidation of Magnetite to Hematite in Air and Cyclic Reduction/Oxidation Under Carbon Looping Combustion Conditions. Metallurgical and Materials Transactions E, 2017, 4, 114-122.	0.5	3

#	Article	IF	CITATIONS
550	Zeolite-Supported Iron Oxides as Durable and Selective Oxygen Carriers for Chemical Looping Combustion. Energy & amp; Fuels, 2017, 31, 11225-11233.	2.5	11
551	Evaluation of (MnxFe1-x)2TiyOz Particles as Oxygen Carrier for Chemical Looping Combustion. Energy Procedia, 2017, 114, 302-308.	1.8	6
552	Negative CO2 Emissions with Chemical-Looping Combustion of Biomass – A Nordic Energy Research Flagship Project. Energy Procedia, 2017, 114, 6074-6082.	1.8	39
553	Sorption enhanced reforming of methane combined with an iron oxide chemical loop for the production of hydrogen with CO2 capture: Conceptual design and operation strategy. Applied Thermal Engineering, 2017, 125, 811-822.	3.0	17
554	Copper-based oxygen carriers supported with alumina/lime for the chemical looping conversion of gaseous fuels. Journal of Energy Chemistry, 2017, 26, 891-901.	7.1	11
555	Cement bonded fine hematite and copper ore particles as oxygen carrier in chemical looping combustion. Applied Energy, 2017, 204, 242-253.	5.1	43
556	An integrated fuel reactor coupled with an annular carbon stripper for coal-fired chemical looping combustion. Powder Technology, 2017, 320, 519-529.	2.1	18
557	Economic assessment of packed bed chemical looping combustion and suitable benchmarks. International Journal of Greenhouse Gas Control, 2017, 64, 223-233.	2.3	20
558	Manufacturing of Perovskite Oxygen Carriers by Spray Granulation for Chemical Looping Combustion. Energy Technology, 2017, 5, 2119-2127.	1.8	3
559	SPH approach for simulating hydro-mechanical processes with large deformations and variable permeabilities. Acta Geotechnica, 2018, 13, 303.	2.9	10
560	Rate-Equation-Based Grain Model for the Carbonation of CaO with CO ₂ . Energy & Fuels, 2017, 31, 14018-14032.	2.5	21
561	Cogeneration of power and H2 by steam gasification and syngas chemical looping of macroalgae. Applied Energy, 2017, 207, 134-145.	5.1	86
562	Investigation of oxygen transport membrane reactors for oxy-fuel combustion and carbon capture purposes. Proceedings of the Combustion Institute, 2017, 36, 3969-3976.	2.4	22
563	Chemical-looping combustion with heavy liquid fuels in a 10 kW pilotÂplant. Fuel Processing Technology, 2017, 156, 124-137.	3.7	39
564	Numerical assessment of the effects of carbon deposition and oxidation on chemical looping combustion in a packed-bed reactor. Chemical Engineering Science, 2017, 160, 85-95.	1.9	18
565	Research challenges in combustion and gasification arising from emerging technologies employing directly irradiated concentrating solar thermal radiation. Proceedings of the Combustion Institute, 2017, 36, 2055-2074.	2.4	34
566	Elutriation of fines from binary particle mixtures in bubbling fluidized bed cold model. Powder Technology, 2017, 305, 340-346.	2.1	18
567	Application of multiphase reaction engineering and process intensification to the challenges of sustainable future energy and chemicals. Chemical Engineering Science, 2017, 157, 15-25.	1.9	41

#	Article	IF	CITATIONS
568	Thermodynamics on sulfur migration in CaSO4 oxygen carrier reduction by CO. Chemical Research in Chinese Universities, 2017, 33, 979-985.	1.3	2
570	Numerical Modeling of Oxygen Carrier Performances (NiO/NiAl2O4) for Chemical-Looping Combustion. Energies, 2017, 10, 864.	1.6	5
571	Reactor Design for Sorption-Enhanced Reforming Using Ca Cu Chemical Loops. Advances in Chemical Engineering, 2017, 51, 207-260.	0.5	4
572	Synergy effects of combined red muds as oxygen carriers for chemical looping combustion of methane. Chemical Engineering Journal, 2018, 341, 588-600.	6.6	73
573	Estimation of the carbonation reaction kinetic parameters for dilute methane and carbon dioxide conditions in a calcium looping process. Environmental Progress and Sustainable Energy, 2018, 37, 1312-1318.	1.3	3
574	Effect of the Addition of CeO ₂ or MgO on the Oxygen Carrier Capacity and Rate of Redox Reactions of NiO/Fe ₂ O ₃ /Al ₂ O ₃ Oxygen Carriers. ACS Omega, 2018, 3, 4378-4383.	1.6	4
575	Stabilizing Particles of Manganeseâ€Iron Oxide with Additives for Thermochemical Energy Storage. Energy Technology, 2018, 6, 2154-2165.	1.8	31
576	The effect of different particle residence time distributions on the chemical looping combustion process. Applied Energy, 2018, 216, 358-366.	5.1	14
577	Chemical looping combustion of four different solid fuels using a manganese-silicon-titanium oxygen carrier. International Journal of Greenhouse Gas Control, 2018, 70, 88-96.	2.3	28
578	Techno-economic assessment of solid–gas thermochemical energy storage systems for solar thermal power applications. Energy, 2018, 149, 473-484.	4.5	177
579	An overview of problems and solutions for components subjected to fireside of boilers. International Journal of Industrial Chemistry, 2018, 9, 1-15.	3.1	25
580	Performance of an iron based oxygen carrier in a 120â€ [−] kWth chemical looping combustion pilot plant. Fuel, 2018, 217, 561-569.	3.4	11
581	Characteristics of a 10â€`kW honeycomb reactor for natural gas fueled chemical-looping combustion. Applied Energy, 2018, 213, 285-292.	5.1	15
582	Dynamic simulation of fluidized bed chemical looping combustion process with iron based oxygen carrier. Fuel, 2018, 214, 436-445.	3.4	21
583	Evolution of CO2 capture technology between 2007 and 2017 through the study of patent activity. Applied Energy, 2018, 211, 1282-1296.	5.1	95
584	Energy and Exergy Analysis of Power Generation Systems with Chemical Looping Combustion of Coal. Chemical Engineering and Technology, 2018, 41, 776-787.	0.9	18
585	Chemical-looping combustion of plastic wastes for in situ inhibition of dioxins. Combustion and Flame, 2018, 191, 9-18.	2.8	46
586	Chemical looping combustion of solid fuels. Progress in Energy and Combustion Science, 2018, 65, 6-66.	15.8	433

#	Article	IF	CITATIONS
587	Oxidation and reduction kinetic of YBaCo4O7+l̂´ and substituted oxygen carriers. Journal of Thermal Analysis and Calorimetry, 2018, 134, 2213-2221.	2.0	6
588	Quantifying the role and value of chemical looping combustion in future electricity systems via a retrosynthetic approach. International Journal of Greenhouse Gas Control, 2018, 73, 1-15.	2.3	15
589	Mature versus emerging technologies for CO2 capture in power plants: Key open issues in post-combustion amine scrubbing and in chemical looping combustion. Frontiers of Chemical Science and Engineering, 2018, 12, 315-325.	2.3	39
590	Mechanism of lignite-to-pure syngas low temperature chemical looping gasification synergistic in situ S capture. Fuel, 2018, 222, 675-686.	3.4	26
591	Dynamic flowsheet simulation for chemical looping combustion of methane. International Journal of Greenhouse Gas Control, 2018, 72, 26-37.	2.3	18
592	Power Generation Based on Chemical Looping Combustion: Will It Qualify To Reduce Greenhouse Gas Emissions from Life-Cycle Assessment?. ACS Sustainable Chemistry and Engineering, 2018, 6, 6730-6737.	3.2	25
593	Hydrodynamic characteristics in a pilot-scale cold flow model for chemical looping combustion. Advanced Powder Technology, 2018, 29, 1499-1506.	2.0	9
594	Enhancing natural gas-to-liquids (GTL) processes through chemical looping for syngas production: Process synthesis and global optimization. Computers and Chemical Engineering, 2018, 113, 222-239.	2.0	17
595	Life cycle greenhouse gas assessment of hydrogen production via chemical looping combustion thermally coupled steam reforming. Journal of Cleaner Production, 2018, 179, 335-346.	4.6	57
596	Enhanced fuel conversion by staging oxidization in a continuous chemical looping reactor based on iron ore oxygen carrier. Chemical Engineering Journal, 2018, 334, 829-836.	6.6	23
598	Solar thermal hybrids for combustion power plant: A growing opportunity. Progress in Energy and Combustion Science, 2018, 64, 4-28.	15.8	110
599	Development of a chemical-looping combustion reactor having porous honeycomb chamber and experimental validation by using NiO/NiAl2O4. Applied Energy, 2018, 211, 259-268.	5.1	26
600	Power Generation from Coke Oven Gas Using Chemical Looping Combustion: Thermodynamic Simulation. Chemical Engineering and Technology, 2018, 41, 524-531.	0.9	1
601	Importance of spinel reaction kinetics in packed-bed chemical looping combustion using a CuO/Al2O3 oxygen carrier. Chemical Engineering Journal, 2018, 334, 1905-1916.	6.6	9
602	Chemical-looping technologies using circulating fluidized bed systems: Status of development. Fuel Processing Technology, 2018, 172, 1-12.	3.7	172
603	Superiority of Re-circulating Fluidized Bed Reactor Over Existing Reactor Arrangements for Chemical Looping Combustion—A Review. Water Science and Technology Library, 2018, , 77-87.	0.2	1
604	Ca2Fe2O5: A promising oxygen carrier for CO/CH4 conversion and almost-pure H2 production with inherent CO2 capture over a two-step chemical looping hydrogen generation process. Applied Energy, 2018, 211, 431-442.	5.1	119
605	Techno economic analysis of chemical looping system for Indian power plants. Environmental Technology and Innovation, 2018, 9, 16-29.	3.0	2

#	Article	IF	CITATIONS
606	Effect and safety of combination lipidâ€lowering therapies based on statin treatment versus statin monotherapies on patients with high risk of cardiovascular events. Aging Medicine (Milton (N S W)), 2018, 1, 176-184.	0.9	1
607	Hydrodynamic Study of AR Coupling Effects on Solid Circulation and Gas Leakages in a High-Flux In Situ Gasification Chemical Looping Combustion System. Processes, 2018, 6, 196.	1.3	1
608	Experimental Study on Impermeability of Recycled Concrete. E3S Web of Conferences, 2018, 38, 03018.	0.2	0
609	Research on super capacitance properties of modified activated carbon in sodium sulfate electrolyte. MATEC Web of Conferences, 2018, 238, 01003.	0.1	2
610	Prediction of In-Situ Gasification Chemical Looping Combustion Effects of Operating Conditions. Catalysts, 2018, 8, 526.	1.6	9
611	A Multi-scale model for CO2 capture: A Nickel-based oxygen carrier in Chemical-looping Combustion. IFAC-PapersOnLine, 2018, 51, 97-102.	0.5	10
613	Performance in Chemical Looping Staged Combustion of Coal by Using Hematite as Oxygen Carrier. Industrial & Engineering Chemistry Research, 2018, 57, 16486-16494.	1.8	9
614	Performance in Coupled Fluidized Beds for Chemical Looping Combustion of CO and Biomass Using Hematite as an Oxygen Carrier. Energy & Fuels, 2018, 32, 12721-12729.	2.5	15
615	Experimental Method and Setup for Laboratory Fluidized Bed Reactor Testing. Energies, 2018, 11, 2505.	1.6	36
616	Characterization for Disposal of the Residues Produced by Materials Used as Solid Oxygen Carriers in an Advanced Chemical Looping Combustion Process. Applied Sciences (Switzerland), 2018, 8, 1787.	1.3	1
617	Carrying Capacity and Gas Flow Path Mechanism of a Novel Multistage Air Reactor for Chemical Looping Combustion. Energy & Fuels, 2018, 32, 12665-12678.	2.5	6
620	Effect of baffle on hydrodynamics in the air reactor of dual circulating fluidized bed for chemical looping process. Powder Technology, 2018, 340, 88-98.	2.1	9
621	Extension and evaluation of a macroscopic model for syngas-fueled chemical looping combustion. Chemical Engineering and Processing: Process Intensification, 2018, 133, 106-116.	1.8	9
622	Reactivity of Natural Ilmenite and Fe ₂ O ₃ /Al ₂ O ₃ Oxygen Carriers over Multiple Cycles. Journal of Chemical Engineering of Japan, 2018, 51, 855-864.	0.3	3
623	Negative CO2 emissions through the use of biofuels in chemical looping technology: A review. Applied Energy, 2018, 232, 657-684.	5.1	166
624	Particle-Motion Behaviors in a Dual Circulating Fluidized Bed by a Multiphase Particle-in-Cell Method. Industrial & Engineering Chemistry Research, 2018, 57, 14809-14821.	1.8	9
625	Reprint of: Enhancing natural gas-to-liquids (GTL) processes through chemical looping for syngas production: Process synthesis and global optimization. Computers and Chemical Engineering, 2018, 116, 521-538.	2.0	3
626	Defect control for large-scale thin-film composite membrane and its bench-scale demonstration. Journal of Membrane Science, 2018, 566, 374-382.	4.1	14

#	Article	IF	CITATIONS
627	Macroscopic fuel reactor modelling of a 5†kWth interconnected fluidized bed for in-situ gasification chemical looping combustion of coal. Chemical Engineering Journal, 2018, 348, 978-991.	6.6	15
628	Chemical looping combustion of biomass in 10- and 100-kW pilots – Analysis of conversion and lifetime using a sintered manganese ore. Fuel, 2018, 231, 73-84.	3.4	56
629	Redox reaction induced morphology and microstructure evolution of iron oxide in chemical looping process. Energy Conversion and Management, 2018, 168, 288-295.	4.4	53
630	Ultra-thin CoO films grown on different oxide substrates: Size and support effects and chemical stability. Journal of Alloys and Compounds, 2018, 758, 5-13.	2.8	3
631	Performance of a 50†kWth coal-fuelled chemical looping combustor. International Journal of Greenhouse Gas Control, 2018, 75, 98-106.	2.3	46
632	Chemical Looping Combustion. , 2018, , 339-358.		Ο
633	Mn-based oxygen carriers prepared by impregnation for Chemical Looping Combustion with diverse fuels. Fuel Processing Technology, 2018, 178, 236-250.	3.7	44
634	Studies on steel slag as an oxygen carrier for chemical looping combustion. Fuel, 2018, 226, 618-626.	3.4	25
635	Review of reactor for chemical looping combustion of solid fuels. International Journal of Greenhouse Gas Control, 2018, 76, 92-110.	2.3	141
636	CO 2 —Capture and Storage. , 2018, , 61-130.		3
637	Integrated liquid fuel based chemical looping combustion – parametric study for efficient power generation and CO2 capture. Applied Energy, 2018, 228, 2398-2406.	5.1	12
638	Chemical Looping Combustion Using Two Different Perovskite Based Oxygen Carriers: A Pilot Study. Energy Technology, 2018, 6, 2333-2343.	1.8	16
639	Modelling of particle flow in a dual circulation fluidized bed by a Eulerian-Lagrangian approach. Chemical Engineering Science, 2018, 192, 619-633.	1.9	39
640	Identifying iron-based oxygen carrier reduction during biomass chemical looping gasification on a thermogravimetric fixed-bed reactor. Applied Energy, 2018, 229, 404-412.	5.1	59
641	Chemical looping at the nanoscale — challenges and opportunities. Current Opinion in Chemical Engineering, 2018, 20, 143-150.	3.8	49
642	Systems analysis of pressurized chemical looping combustion for SAGD applications. International Journal of Greenhouse Gas Control, 2018, 73, 111-123.	2.3	23
643	Gas oxy combustion and conversion technologies for low carbon energy: Fundamentals, modeling and reactors. Proceedings of the Combustion Institute, 2019, 37, 33-56.	2.4	30
644	Combustion of Lignocellulosic Biomass. , 2019, , 267-284.		3

ARTICLE IF CITATIONS Life cycle assessment of natural gas fuelled power plants based on chemical looping combustion 645 4.4 22 technology. Energy Conversion and Management, 2019, 198, 111856. An advancement in CO2 utilization through novel gas switching dry reforming. International Journal 646 2.3 of Greenhouse Gas Control, 2019, 90, 102791. The evaluation of a methane autothermal chemical looping reforming experiment based on exergy 647 1.7 10 analysis. RSC Advances, 2019, 9, 22032-22044. Evaluation of a new DCFB reactor system for chemical looping combustion of gaseous fuels. Applied 648 5.1 Energy, 2019, 255, 113697. Fluidisation of iron-based oxygen carrier for chemical looping combustion. E3S Web of Conferences, 649 0.2 1 2019, 116, 00008. pH Responsive Carboxymethyl Chitosan/Poly(amidoamine) Molecular Gate Membrane for CO₂/N₂ Separation. ACS Applied Materials & amp; Interfaces, 2019, 11, 4.0 42616-42628. Efficiency Improvement of Chemical Looping Combustion Combined Cycle Power Plants. Energy 651 1.8 16 Technology, 2019, 7, 1900567. CPFD simulation and optimization of a 50 kWth dual circulating fluidized bed reactor for chemical 2.3 looping combustion of coal. International Journal of Greenhouse Gas Control, 2019, 90, 102800. Axial Distribution of Permeance and Selectivity of a Porous Cylindrical Tube for Binary Gas Mixtures 653 1.8 1 (CO₂/N₂). Industrial & amp; Engineering Chemistry Research, 2019, 58, 3359-3369. Solid Circulation Characteristics of Two Lower Loop Seals with Two Kinds of Particles in a 654 Circulating Fluidized Bed System. Journal of Chemical Engineering of Japan, 2019, 52, 106-110. Investigation of the Segregation of Binary Mixtures with Iron-Based Particles in a Bubbling Fluidized 655 1.6 5 Bed. AČS Omega, 2019, 4, 9065-9073. Overcoming chemical equilibrium limitations using a thermodynamically reversible chemical reactor. 6.6 Nature Chemistry, 2019, 11, 638-643. Examining and Modeling Oxygen Uncoupling Kinetics of Cu-Based Oxygen Carriers for Chemical Looping with Oxygen Uncoupling (CLOU) in a Drop Tube Fluidized Bed Reactor. Energy & amp; Fuels, 2019, 33, 5610-5619. 657 2.5 19 Novel configuration of supercritical water gasification and chemical looping for highly-efficient 8.2 hydrogen production from microalgae. Renewable and Sustainable Energy Reviews, 2019, 112, 369-381. A Multiscale Model of Oxidation Kinetics for Cu-Based Oxygen Carrier in Chemical Looping with 659 1.3 16 Oxygen Uncoupling. Materials, 2019, 12, 1170. Robust decision making analysis of BECCS (bio-CLC) in a district heating and cooling grid. Sustainable Energy Technologies and Assessments, 2019, 34, 157-172. Thermochemical assessment of chemical looping assisted by oxygen uncoupling with a MnFe-based 661 5.120 oxygen carrier. Applied Energy, 2019, 251, 113340. Gas-fired chemical looping combustion with supercritical CO2 cycle. Applied Energy, 2019, 249, 237-244. 5.1

~		<u> </u>		
(11	ГАТ	リロ	PORT	г
	IAL	IVL.	PUR	

#	Article	IF	CITATIONS
663	Application of Protic Ionic Liquids to CO ₂ Separation in a Sulfonated Polyimide-Derived Ion Gel Membrane. ACS Applied Polymer Materials, 2019, 1, 1579-1589.	2.0	25
664	Experimental study of Cu-modified manganese ore for O2 production in the CLC + CLOU scheme. Fuel, 2019, 244, 69-75.	3.4	4
665	The transformation pathways on the catalytic and stability-promoted CaSO4 reduction in CLC process using Fe2O3 supported. Fuel, 2019, 253, 327-338.	3.4	15
666	Reforming of coal volatiles over ilmenite ore. Fuel Processing Technology, 2019, 192, 96-104.	3.7	6
667	Improved Gas–Solids Mass Transfer in Fluidized Beds: Confined Fluidization in Chemical-Looping Combustion. Energy & Fuels, 2019, 33, 4442-4453.	2.5	7
668	The potential of chemical looping combustion using the gas switching concept to eliminate the energy penalty of CO2 capture. International Journal of Greenhouse Gas Control, 2019, 83, 265-281.	2.3	25
669	Coal Bed Methane Enhancement Techniques: A Review. ChemistrySelect, 2019, 4, 3585-3601.	0.7	38
670	Evaluation of Mn-Fe mixed oxide doped with TiO2 for the combustion with CO2 capture by Chemical Looping assisted by Oxygen Uncoupling. Applied Energy, 2019, 237, 822-835.	5.1	37
671	Improving the efficiency of Chemical Looping Combustion with coal by using ring-type internals in the fuel reactor. Fuel, 2019, 250, 8-16.	3.4	11
672	Effect of Sodium Removal on Chemical Looping Combustion of High-Sodium Coal with Hematite as an Oxygen Carrier. Energy & Fuels, 2019, 33, 2153-2165.	2.5	10
673	Methane Dissociation on α-Fe ₂ O ₃ (0001) and Fe ₃ O ₄ (111) Surfaces: First-Principles Insights into Chemical Looping Combustion. Journal of Physical Chemistry C, 2019, 123, 6450-6463.	1.5	23
674	Experimental and Thermodynamic Study on the Interaction of Copper Oxygen Carriers and Oxide Compounds Commonly Present in Ashes. Energy & amp; Fuels, 2019, 33, 2502-2515.	2.5	15
675	Gas–solid hydrodynamics of an iG-CLC system with a two-stage counter-flow moving bed air reactor. Chemical Engineering Research and Design, 2019, 143, 100-113.	2.7	10
676	The oxygen production pre-combustion (OPPC) IGCC plant for efficient power production with CO2 capture. Energy Conversion and Management, 2019, 201, 112109.	4.4	16
677	Numerical Investigation on the Improvement of Carbon Conversion in a Dual Circulating Fluidized Bed Reactor for Chemical Looping Combustion of Coal. Energy & Fuels, 2019, 33, 12801-12813.	2.5	16
678	Numerical Investigation of Solid-Fueled Chemical Looping Combustion Process Utilizing Char for Carbon Capture. Processes, 2019, 7, 603.	1.3	4
679	CO ₂ Gasification of a Lignite Char in Microfluidized Bed Thermogravimetric Analysis for Chemical Looping Combustion and Chemical Looping with Oxygen Uncoupling. Energy & Fuels, 2019, 33, 449-459.	2.5	42
680	Enhancing the performance of iron ore by introducing K and Na ions from biomass ashes in a CLC process. Energy, 2019, 167, 168-180.	4.5	28

#	Article	IF	CITATIONS
681	Gas switching reforming (GSR) for power generation with CO2 capture: Process efficiency improvement studies. Energy, 2019, 167, 757-765.	4.5	16
682	Recent advances on first-principles modeling for the design of materials in CO2 capture technologies. Chinese Journal of Chemical Engineering, 2019, 27, 1554-1565.	1.7	36
683	Iron-based oxygen carriers in chemical looping conversions: A review. Carbon Resources Conversion, 2019, 2, 23-34.	3.2	137
684	Economic assessment of membrane-assisted autothermal reforming for cost effective hydrogen production with CO2 capture. International Journal of Hydrogen Energy, 2019, 44, 3492-3510.	3.8	34
685	Modelling Chemical-Looping assisted by Oxygen Uncoupling (CLaOU): Assessment of natural gas combustion with calcium manganite as oxygen carrier. Proceedings of the Combustion Institute, 2019, 37, 4361-4369.	2.4	12
686	Reduction and oxidation kinetics of Tierga iron ore for Chemical Looping Combustion with diverse fuels. Chemical Engineering Journal, 2019, 359, 37-46.	6.6	42
687	Chemical-looping combustion: Status and research needs. Proceedings of the Combustion Institute, 2019, 37, 4303-4317.	2.4	141
688	Study of the calcination of CaCO3 by means of a Cu/CuO chemical loop using methane as fuel gas. Catalysis Today, 2019, 333, 176-181.	2.2	12
689	Gas Switching Reforming for syngas production with iron-based oxygen carrier-the performance under pressurized conditions. International Journal of Hydrogen Energy, 2020, 45, 1267-1282.	3.8	15
690	A stochastic approach to model chemical looping combustion. Powder Technology, 2020, 365, 39-51.	2.1	1
691	A framework for the optimization of chemical looping combustion processes. Powder Technology, 2020, 365, 149-162.	2.1	12
692	Avoiding CO2 capture effort and cost for negative CO2 emissions using industrial waste in chemical-looping combustion/gasification of biomass. Mitigation and Adaptation Strategies for Global Change, 2020, 25, 1-24.	1.0	36
693	Biomass Valorization to Bioenergy. Energy, Environment, and Sustainability, 2020, , .	0.6	18
694	Three-dimensional multiphase full-loop simulation of directional separation of binary particle mixtures in high-flux coal-direct chemical-looping combustion system. Particuology, 2020, 49, 179-190.	2.0	8
695	Simulation of a 100-MW solar-powered thermo-chemical air separation system combined with an oxy-fuel power plant for bio-energy with carbon capture and storage (BECCS). Mitigation and Adaptation Strategies for Global Change, 2020, 25, 539-557.	1.0	5
696	Mapping the operating performance of a novel internally circulating fluidized bed reactor applied to chemical looping combustion. Fuel Processing Technology, 2020, 197, 106183.	3.7	15
697	Chemical‣ooping Conversion of Methane: A Review. Energy Technology, 2020, 8, 1900925.	1.8	87
698	Measuring the fast oxidation kinetics of a manganese oxygen carrier using microfluidized bed thermogravimetric analysis. Chemical Engineering Journal, 2020, 385, 123970.	6.6	31

#	Article	IF	CITATIONS
699	Reduction Kinetics of Fe-based Oxygen Carriers Using Syngas in a Honeycomb Fixed-Bed Reactor for Chemical-Looping Combustion. Journal of Thermal Science, 2020, 29, 13-24.	0.9	5
700	Kinetics of redox reactions of CuO@TiO2–Al2O3 for chemical looping combustion and chemical looping with oxygen uncoupling. Combustion and Flame, 2020, 213, 255-267.	2.8	53
701	Thermodynamic feasibility for molybdenum-based gaseous oxides assisted looping coal gasification and its derived power plant. Energy, 2020, 194, 116830.	4.5	5
702	Interaction of oxygen carriers with common biomass ash components. Fuel Processing Technology, 2020, 200, 106313.	3.7	26
703	Dynamic modelling and optimal control strategies for chemical-looping combustion in an industrial-scale packed bed reactor. Fuel, 2020, 262, 116544.	3.4	15
704	Reduction and oxidation behavior of strontium perovskites for chemical looping air separation. International Journal of Greenhouse Gas Control, 2020, 94, 102891.	2.3	25
705	Effects of Na ₂ CO ₃ /K ₂ CO ₃ on Chemical Looping Combustion Using Fe ₂ O ₃ /Al ₂ O ₃ as Oxygen Carrier. Chemical Engineering and Technology, 2020, 43, 412-421.	0.9	13
706	Development of tailor-made oxygen carriers and reactors for chemical looping processes at Huazhong University of Science & Technology. International Journal of Greenhouse Gas Control, 2020, 93, 102898.	2.3	73
707	Effect of Char Loading on Reduction Kinetics of Cu-Based Oxygen Carriers in a Drop-Tube Fluidized-Bed Reactor at Temperatures from 850 to 1100 °C: Experiment and CFD Modeling. Energy & Fuels, 2020, 34, 728-741.	2.5	2
708	Thermal management for chemical looping systems with chemical production. Chemical Engineering Science, 2020, 214, 115431.	1.9	19
709	Coal-fired chemical looping combustion coupled with a high-efficiency annular carbon stripper. International Journal of Greenhouse Gas Control, 2020, 93, 102889.	2.3	24
710	Evaluation of a bauxite cement-bonded Fe-based oxygen carrier during a hundred of cycles under coal-fueled chemical looping combustion conditions. Fuel Processing Technology, 2020, 199, 106267.	3.7	28
711	Chemical looping electricity storage. Applied Energy, 2020, 279, 115553.	5.1	12
712	Experimental demonstration of pressurized chemical looping combustion in an internally circulating reactor for power production with integrated CO2 capture. Chemical Engineering Journal, 2020, 401, 125974.	6.6	11
713	Process simulations of blue hydrogen production by upgraded sorption enhanced steam methane reforming (SE-SMR) processes. Energy Conversion and Management, 2020, 222, 113144.	4.4	72
714	Insights into the co-combustion of coal and biomass mixtures using a copper-based oxygen carrier in chemical looping combustion. International Journal of Oil, Gas and Coal Technology, 2020, 25, 55.	0.1	2
715	Interaction of Iron Oxygen Carriers and Alkaline Salts Present in Biomass-Derived Ash. Energy & Fuels, 2020, 34, 11143-11153.	2.5	15
716	Solar methanol by hybridizing natural gas chemical looping reforming with solar heat. Applied Energy, 2020, 277, 115521.	5.1	25

#	ARTICLE	IF	Citations
717	Numerical and experimental analysis for simulating fuel reactor in chemical looping combustor system. International Journal of Coal Science and Technology, 2020, 7, 551-559.	2.7	11
718	Development of Chemical Looping Combustion Power Systems at the Chinese Academy of Sciences. Energy & Fuels, 2020, 34, 11791-11812.	2.5	8
719	Experimental and kinetics investigations of separated-gasification chemical looping combustion of char with an iron ore as the oxygen carrier. Fuel Processing Technology, 2020, 210, 106554.	3.7	13
720	Incentive Programs Caused by the Carbon Capture Utilization and Storage Technology Profit's Effect: Optimal Configuration and Energy Planning of Hybrid Microgrid Involving INVELOX Turbine. Energy Technology, 2020, 8, 2000398.	1.8	11
721	Substituted SrFeO ₃ as robust oxygen sorbents for thermochemical air separation: correlating redox performance with compositional and structural properties. Physical Chemistry Chemical Physics, 2020, 22, 8924-8932.	1.3	43
722	Integration of gas switching combustion in a humid air turbine cycle for flexible power production from solid fuels with nearâ€zero emissions of CO 2 and other pollutants. International Journal of Energy Research, 2020, 44, 7299-7322.	2.2	5
723	Multi-fluid modelling of hydrodynamics in a dual circulating fluidized bed. Advanced Powder Technology, 2020, 31, 2778-2791.	2.0	17
724	Performance and mechanism study of LaFeO3 for biomass chemical looping gasification. Journal of Materials Science, 2020, 55, 11151-11166.	1.7	14
725	Effect of baffles on bubble behavior in a bubbling fluidized bed for chemical looping processes. Particuology, 2020, 53, 154-167.	2.0	7
726	Thermodynamic assessment of chemical looping combustion and solar thermal methane cracking-based integrated system for green ammonia production. Thermal Science and Engineering Progress, 2020, 19, 100588.	1.3	17
727	Oxygenâ€Carrier Development of Calcium Manganite–Based Materials with Perovskite Structure for Chemicalâ€Looping Combustion of Methane. Energy Technology, 2020, 8, 2000069.	1.8	16
728	Comparative CFD simulation studies on monolith and packed bed reactors for oxidation of Cu in unmixed combustion (UMC) process. Chemical Engineering Research and Design, 2020, 160, 521-532.	2.7	7
729	High-Efficiency Bioenergy Carbon Capture Integrating Chemical Looping Combustion with Oxygen Uncoupling and a Large Cogeneration Plant. Energies, 2020, 13, 3075.	1.6	5
730	An investigative study on replacing the conventional furnaces of naphtha reforming with chemical looping combustion for clean hydrogen production. International Journal of Hydrogen Energy, 2020, 45, 19405-19419.	3.8	15
731	Energy and Exergy Investigations of a Separated-Gasification Chemical Looping Combustion-Combined Cycle System for Power Production. Industrial & Engineering Chemistry Research, 2020, 59, 4580-4588.	1.8	2
732	CO2 capturing, thermo-kinetic principles, synthesis and amine functionalization of covalent organic polymers for CO2 separation from natural gas: A review. Journal of Natural Gas Science and Engineering, 2020, 77, 103203.	2.1	68
733	Bauxite waste with low Fe ₂ O ₃ and high Na concentration as a promising oxygen carrier in chemical looping combustion. International Journal of Energy Research, 2020, 44, 3790-3800.	2.2	19
734	A novel air reactor concept for chemical looping combustion systems operated at high pressure. Chemical Engineering Journal, 2020, 390, 124507.	6.6	9

#	Article	IF	CITATIONS
735	Magnetic separation of ilmenite used as oxygen carrier during combustion of biomass and the effect of ash layer buildup on its activity and mechanical strength. Fuel, 2020, 269, 117470.	3.4	36
736	Hydrogen and Power Cogeneration Based on Chemical Looping Combustion: Is It Capable of Reducing Carbon Emissions and the Cost of Production?. Energy & Fuels, 2020, 34, 3501-3512.	2.5	15
737	Chemical Looping Gasification of Torrefied Biomass Using NiFe ₂ O ₄ as an Oxygen Carrier for Syngas Production and Tar Removal. Energy & Fuels, 2020, 34, 6008-6019.	2.5	28
738	Autothermal Operation Strategies of Chemical Looping Processes for Hydrogen Generation: Process Simulation, Parametric Studies, and Exergy Analysis. Industrial & Engineering Chemistry Research, 2020, 59, 5877-5890.	1.8	22
739	Tracking the evolution of a single composite particle during redox cycling for application in H2 production. Scientific Reports, 2020, 10, 5266.	1.6	6
740	Experimental study on honeycomb reactor using methane via chemical looping cycle for solar syngas. Applied Energy, 2020, 268, 114995.	5.1	7
741	Experimental and Thermodynamic Study on the Interaction of Copper Oxygen Carriers and Alkaline-Containing Salts Commonly Present in Ashes. Energy & Fuels, 2020, 34, 4421-4432.	2.5	5
742	Chemical looping combustion with nanosize oxygen carrier: a review. International Journal of Environmental Science and Technology, 2021, 18, 787-798.	1.8	13
743	Cost-effective clean ammonia production using membrane-assisted autothermal reforming. Chemical Engineering Journal, 2021, 404, 126550.	6.6	24
744	Comparison of CFD-DEM and TFM approaches for the simulation of the small scale challenge problem 1. Powder Technology, 2021, 378, 85-103.	2.1	32
745	A brief review for chemical looping combustion as a promising CO2 capture technology: Fundamentals and progress. Science of the Total Environment, 2021, 764, 142892.	3.9	105
746	A review on fluidization of Geldart Group C powders through nanoparticle modulation. Powder Technology, 2021, 381, 698-720.	2.1	21
747	Sulfur fate during in-situ gasification chemical looping combustion (iG-CLC) of coal. Chemical Engineering Journal, 2021, 406, 126773.	6.6	29
748	Commissioning, performance benchmarking, and investigation of alkali emissions in a 10ÂkWth solid fuel chemical looping combustion pilot. Fuel, 2021, 287, 119530.	3.4	51
749	Characterisation of Australian ilmenite oxygen carrier during chemical looping combustion of Victorian brown coal. Fuel Processing Technology, 2021, 213, 106669.	3.7	11
750	ParametricÂinvestigationÂof CuO-doped charged nanofluid in solar water heater. International Journal of Environmental Science and Technology, 2021, 18, 2855-2864.	1.8	5
751	A review of solid desiccant dehumidifiers: Current status and near-term development goals in the context of net zero energy buildings. Renewable and Sustainable Energy Reviews, 2021, 137, 110456.	8.2	46
752	Co-precipitated Cu-Mn mixed metal oxides as oxygen carriers for chemical looping processes. Chemical Engineering Journal, 2021, 407, 127093.	6.6	16

#	Article	IF	CITATIONS
753	Numerical Analyses of Heterogeneous CLC Reaction and Transport Processes in Large Oxygen Carrier Particles. Processes, 2021, 9, 125.	1.3	8
754	Investigation of CuO–Fe ₂ O ₃ Oxygen Carriers with Different Supports in Chemical Looping Combustion. Energy & Fuels, 2021, 35, 2434-2442.	2.5	5
755	Solid Circulation Study in a 1.5 MWth Cold Flow Model of Chemical Looping Combustion. Industrial & amp; Engineering Chemistry Research, 2021, 60, 2265-2277.	1.8	4
756	Characteristic Evaluation and Process Simulation of CuFe ₂ O ₄ as Oxygen Carriers in Coal Chemical Looping Gasification. ACS Omega, 2021, 6, 4783-4792.	1.6	13
757	Inherent CO ₂ Capture and H ₂ Production Enhancement in a New Glycerol Steam Reformer Coupled with Chemical Looping Combustion. Energy & Fuels, 2021, 35, 5049-5063.	2.5	16
758	Finding synergy between renewables and coal: Flexible power and hydrogen production from advanced IGCC plants with integrated CO2 capture. Energy Conversion and Management, 2021, 231, 113866.	4.4	23
759	Performance of an oxy-polishing step in the 100†kWth chemical looping combustion prototype. Chemical Engineering Journal, 2021, 409, 128202.	6.6	20
760	Oxygen carrier aided combustion (OCAC) of two waste fuels - Experimental and theoretical study of the interaction between ilmenite and zinc, copper and lead. Biomass and Bioenergy, 2021, 148, 106060.	2.9	17
761	Different bubble behaviors in gas-solid fluidized bed of Geldart group A and group C+ particles. Powder Technology, 2021, 384, 431-441.	2.1	12
762	Comparative Study: Impacts of Ca and Mg Salts on Iron Oxygen Carriers in Chemical Looping Combustion of Biomass. ACS Omega, 2021, 6, 16649-16660.	1.6	11
763	Recent Advances and Development of Various Oxygen Carriers for the Chemical Looping Combustion Process: A Review. Industrial & Engineering Chemistry Research, 2021, 60, 8621-8641.	1.8	44
764	Investigation of the Oxygen Supply and Distribution in a Bubbling Fluidized Bed by Using Natural Ilmenite for Oxygen Carrier Aided Combustion. Energy & Fuels, 2021, 35, 12352-12366.	2.5	6
765	Redox performance of manganese ore in a fluidized bed thermogravimetric analyzer for chemical looping combustion. Fuel, 2021, 295, 120564.	3.4	26
766	CFD study of nonuniformity of gas-solid flow through a chemical looping combustion system with symmetrical series loops. Powder Technology, 2021, 387, 108-124.	2.1	6
767	3kW circulating fluidized bed chemical looping reactor - A thermochemical and chemomechanical investigation on the performance of Cu- impregnated Al2O3 as an oxygen carrier material. International Journal of Greenhouse Gas Control, 2021, 109, 103384.	2.3	7
768	Optimization of synthesis gas production in the biomass chemical looping gasification process operating under auto-thermal conditions. Energy, 2021, 226, 120317.	4.5	30
769	Selective hydrogen combustion as an effective approach for intensified chemical production via the chemical looping strategy. Fuel Processing Technology, 2021, 218, 106827.	3.7	17
770	Investigation of biomass alkali release in a dual circulating fluidized bed chemical looping combustion system. Fuel, 2021, 297, 120743.	3.4	43

#	Article	IF	CITATIONS
771	Technoeconomic Analysis of a Fixed Bed System for Single/Two–Stage Chemical Looping Combustion. Energy Technology, 2021, 9, 2100538.	1.8	3
772	Techno-Economic Assessment of IGCC Power Plants Using Gas Switching Technology to Minimize the Energy Penalty of CO2 Capture. Clean Technologies, 2021, 3, 594-617.	1.9	5
773	Effect of the Presence of Siloxanes in Biogas Chemical Looping Combustion. Energy & Fuels, 2021, 35, 14984-14994.	2.5	6
774	Chemical Looping Air Separation Using a Perovskite-Based Oxygen Sorbent: System Design and Process Analysis. ACS Sustainable Chemistry and Engineering, 2021, 9, 12185-12195.	3.2	28
775	CO2 capturing methods: Chemical looping combustion (CLC) as a promising technique. Science of the Total Environment, 2021, 788, 147850.	3.9	68
776	Characterization, kinetics and stability studies of NiO and CuO supported by Al2O3, ZrO2, CeO2 and their combinations in chemical looping combustion. Catalysis Today, 2022, 397-399, 206-219.	2.2	4
777	Integrated capture and conversion of CO2 into methane using NaNO3/MgOÂ+ÂRu/Al2O3 as a catalytic sorbent. Chemical Engineering Journal, 2021, 420, 130369.	6.6	44
778	Retrospect and prospect of carbon stripper technology in solid-fuel chemical looping combustion. Fuel Processing Technology, 2021, 221, 106920.	3.7	8
779	Life cycle assessment of CO2 emission reduction potential of carbon capture and utilization for liquid fuel and power cogeneration. Fuel Processing Technology, 2021, 221, 106924.	3.7	26
780	Binary-ore oxygen carriers prepared by extrusion–spheronization method for chemical looping combustion of coal. Fuel Processing Technology, 2021, 221, 106921.	3.7	11
781	Hydrogen production from biomasses and wastes: A technological review. International Journal of Hydrogen Energy, 2021, 46, 33756-33781.	3.8	125
782	A modified correlation to calculate the transport velocity for pressurized chemical looping combustion. Powder Technology, 2021, 393, 421-426.	2.1	2
783	Perovskite oxygen carrier with chemical memory under reversible chemical looping conditions with and without SO2 during reduction. Chemical Engineering Journal, 2021, 424, 130417.	6.6	10
784	Oxidization and reduction kinetics of a manganese oxygen carrier granulated with the spray drying method at a tonnage scale for chemical looping combustion. Fuel, 2021, 303, 121267.	3.4	11
785	Effect of the oxygen carrier ilmenite on NOX formation in chemical-looping combustion. Fuel Processing Technology, 2021, 222, 106962.	3.7	9
786	A four-quadrant flow regime map for two-phase liquid-solids and gas-solids fluidization systems. Powder Technology, 2021, 394, 424-438.	2.1	9
787	Pinch combined with exergy analysis for heat exchange network and techno-economic evaluation of coal chemical looping combustion power plant with CO2 capture. Energy, 2022, 238, 121720.	4.5	27
788	First-principles-based microkinetic rate equation theory for oxygen carrier reduction in chemical looping. Chemical Engineering Science, 2022, 247, 117042.	1.9	14

#	Article	IF	CITATIONS
790	Reduction Kinetics of a CasO4 Based Oxygen Carrier for Chemical-Looping Combustion. , 2009, , 519-526.		5
791	Chemical Looping Autothermal Reforming at a 120 kW Pilot Rig. , 2009, , 603-607.		2
792	Reactor Design, Cold-Model Experiment and CFD Modeling for Chemical Looping Combustion. , 2013, , 1209-1217.		2
793	Development of Oxygen Carriers for Chemical-Looping Combustion. , 2005, , 587-604.		16
794	Chemical-Looping Combustion—Reactor Fluidization Studies and Scale-Up Criteria. , 2005, , 605-623.		3
795	Applying machine learning algorithms in estimating the performance of heterogeneous, multi-component materials as oxygen carriers for chemical-looping processes. Chemical Engineering Journal, 2020, 387, 124072.	6.6	48
796	Study on multi-cycle reaction performance of Fe/Al compound oxygen carriers in chemical-looping pyrolysis of coal tar. Chemical Engineering Science, 2020, 217, 115530.	1.9	9
797	Design and Scheduling of Semibatch Chemical-Looping Reactors. Industrial & Engineering Chemistry Research, 2020, 59, 6994-7006.	1.8	10
798	Review of Computational Fluid Dynamics Studies on Chemical Looping Combustion. Journal of Energy Resources Technology, Transactions of the ASME, 2021, 143, .	1.4	13
799	Influence of the oxidation step on the behaviour and the performances of an oxygen carrier in fixed bed reactor. Materials Research, 2014, 17, 219-226.	0.6	3
800	Developments in fluidized bed conversion of solid fuels. Thermal Science, 2016, 20, 1-18.	0.5	28
801	Denitrogenation (or Oxyfuel Concepts). Oil and Gas Science and Technology, 2005, 60, 485-495.	1.4	29
802	The Combustion System Emitting Only Pure Carbon Dioxide by Using Molten Salt's Redox Couples. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2005, 84, 39-45.	0.2	1
803	Preparation and Characterization of Lanthanum-Promoted Copper-based Oxygen Carriers for Chemical Looping Combustion Process. Aerosol and Air Quality Research, 2014, 14, 572-584.	0.9	18
804	Evolution, Fields of Research, and Future of Chemical-Looping Combustion (CLC) process: A Review. Environmental Engineering Research, 2014, 19, 299-308.	1.5	11
805	Fluidized bed combustion research and development in Sweden: A historical survey. Thermal Science, 2003, 7, 3-16.	0.5	4
806	Carbon Sequestration. , 2008, , 569-601.		0
807	Design and Cold Mode Experiment of Dual Bubbling Fluidized Bed Reactors for Multiple CCR Cycles. , 2009, , 533-539.		0

# 808	ARTICLE Multi-Objective Optimization Analysis of the IGCC System with Chemical Looping Combustion. , 2009, , 479-487.	IF	Citations
810	Carbon capture and storage: The way ahead. Sustainable Technologies Systems & Policies, 2012, , 9.	0.0	1
811	Numerical Simulation of Regeneration Process of Oxygen Carriers in Fluidized Bed. , 0, , .		0
812	Chemical Looping Combustion. , 2015, , 1-27.		0
813	The Effect of CBB(CaO·BaO·B ₂ O ₃) Addition on the Physical Properties and Oxygen Transfer Reactivity of NiO-based Oxygen Carriers for Chemical Looping Combustion. Transactions of the Korean Hydrogen and New Energy Society, 2016, 27, 95-105.	0.1	1
814	Performance Comparison of Spray-dried Mn-based Oxygen Carriers Prepared with γ-Al2O3, α-Al2O3, and MgAl2O4as Raw Support Materials. KEPCO Journal on Electric Power and Energy, 2016, 2, 285-291.	0.1	0
815	Chemical Looping Combustion. , 2017, , 2647-2679.		0
816	Process Simulations of Chemical Looping Combustion for Mixtures of Coal and Biomass Using an Iron Based Oxygen Carrier—Part I. Energy, Environment, and Sustainability, 2020, , 159-175.	0.6	0
817	An analysis approach of mass and energy balance in a dual-reactor circulating fluidized bed system. Chinese Journal of Chemical Engineering, 2021, 40, 18-26.	1.7	2
818	Design Theory of a CLC Air Reactor with Oxygen Carrier Recirculation and Its Application to a 3 MW _{th} Pilot. Energy & Fuels, 2021, 35, 1580-1593.	2.5	7
820	Iron-based oxygen carrier particles produced from micronized size minerals or industrial wastes. Powder Technology, 2022, 396, 637-647.	2.1	5
821	Chemical Looping for Combustion of Solid Biomass: A Review. Energy & amp; Fuels, 2021, 35, 19248-19265.	2.5	32
822	Alkali interactions with a calcium manganite oxygen carrier used in chemical looping combustion. Fuel Processing Technology, 2022, 227, 107099.	3.7	20
823	Investigation on effect of ionic liquid on CO2 separation performance and properties of novel co-casted dual-layer PEBAX-ionic liquid/PES composite membrane. Journal of Industrial and Engineering Chemistry, 2022, 107, 180-196.	2.9	12
824	Correlating electronegativity in bimetallic oxygen carriers for chemical looping combustion. Thermal Science and Engineering Progress, 2022, 27, 101170.	1.3	1
825	Sequestration of nitrous oxide for nutrient recovery and product formation. , 2022, , 155-177.		0
827	Three-dimensional simulation of a gas-fueled chemical looping combustion system with dual circulating fluidized bed reactors. Energy, 2022, 246, 123293.	4.5	7
828	Advances in the integration of ionic liquids with the membrane technology for gas separation. , 2022, , 167-187.		4

#	ARTICLE	IF	CITATIONS
829	Achieving Adequate Circulation in Chemical Looping Combustion─Design Proposal for a 200 MW _{th} Chemical Looping Combustion Circulating Fluidized Bed Boiler. Energy & Fuels, 2022, 36, 9588-9615.	2.5	22
831	Techno-economic assessment of a chemical looping splitting system for H2 and CO Co-generation. Green Energy and Environment, 2023, 8, 338-350.	4.7	5
832	Corrosion of Heat Transfer Materials by Potassium-Contaminated Ilmenite Bed Particles in Chemical-Looping Combustion of Biomass. Energies, 2022, 15, 2740.	1.6	5
833	Modeling the Impact of Operating Variables on Ash Agglomeration in Chemical Looping Combustion of Solid Fuels. Industrial & Engineering Chemistry Research, 2021, 60, 17970-17979.	1.8	2
834	Gas-Solid Heat Transfer Computation from Particle-Resolved Direct Numerical Simulations. Fluids, 2022, 7, 15.	0.8	3
835	Kinetic modeling of fractal aggregate mobility. Physics of Fluids, 2022, 34, .	1.6	10
839	Chemical looping combustion for inherent CO2 capture. , 2022, , 91-119.		0
840	Chemical Looping Technology. , 2022, , 1689-1723.		Ο
841	Experimental Investigation of the Effects of Fluidizing Gas on Copper–Manganese Mixed Oxide's Reactivity for Chemical Looping Combustion of CH ₄ . Industrial & Engineering Chemistry Research, 2022, 61, 7245-7254.	1.8	4
842	Oxygen Carrier and Alkali Interaction in Chemical Looping Combustion: Case Study Using a Braunite Mn Ore and Charcoal Impregnated with K ₂ CO ₃ or Na ₂ CO ₃ . Energy & Fuels, 2022, 36, 9470-9484.	2.5	10
843	Coupled LBM-DEM simulations using the partially saturated method: Theoretical and computational aspects. Powder Technology, 2022, 405, 117556.	2.1	5
844	Synthesis, characterization, and kinetic study of nanostructured copper-based oxygen carrier supported on silica and zirconia aerogels in the cyclic chemical looping combustion process. Chemical Engineering Journal, 2022, 448, 137756.	6.6	13
845	Mechanistic study of chemical looping reactions between solid carbon fuels and CuO. Combustion and Flame, 2022, 244, 112216.	2.8	4
846	Three-dimensional unsteady numerical simulation of a 150ÂkW full-loop chemical looping combustion pilot with biomass as fuel: A hydrodynamic investigation. Chemical Engineering Science, 2022, 260, 117835.	1.9	4
847	Controlling the Solid Circulation Rate and Residence Time in Whole Loops of a 1.5 MW _{th} Chemical Looping Combustion Cold Model. Energy & Fuels, 2022, 36, 9513-9528.	2.5	5
848	Physical and Fuel Properties of <i>Bambusa vulgaris</i> of Different Age Groups and Their Effect on Producing Biofuel. South-East European Forestry, 2022, 13, 53-64.	0.1	0
849	Chemical Looping Partial Oxidation of Methane: Reducing Carbon Deposition through Alloying. Energy & Fuels, 2022, 36, 9780-9784.	2.5	7
850	Selecting and Testing of Cement-Bonded Magnetite and Chalcopyrite as Oxygen Carrier for Chemical-Looping Combustion. Energies, 2022, 15, 5093.	1.6	2

#	Article	IF	CITATIONS
851	Carbon dioxide splitting and hydrogen production using a chemical looping concept: A review. Journal of CO2 Utilization, 2022, 63, 102139.	3.3	15
852	Reaction characteristics of Shenmu coal pyrolysis volatiles with an iron-based oxygen carrier in a two-stage fixed-bed reactor. Fuel Processing Technology, 2022, 235, 107371.	3.7	2
853	Chemical looping reforming: process fundamentals and oxygen carriers. Discover Chemical Engineering, 2022, 2, .	1.1	8
854	A DFT-based microkinetic theory for Fe2O3 reduction by CO in chemical looping. Proceedings of the Combustion Institute, 2023, 39, 4447-4455.	2.4	4
855	Redox Reaction Kinetics of a Fe–Cu-Based Oxygen Carrier Measured with Microfluidized Bed Thermogravimetric Analysis. Energy & Fuels, 2022, 36, 9672-9686.	2.5	6
856	Thermal Conversion of Sodium Phytate Using the Oxygen Carrier Ilmenite Interaction with Na-Phosphate and Its Effect on Reactivity. Energy & Fuels, 2022, 36, 9423-9436.	2.5	3
857	Overview of Fluidized Bed Reactor Modeling for Chemical Looping Combustion: Status and Research Needs. Energy & Fuels, 2022, 36, 9385-9409.	2.5	9
858	Hydrotalcite-Derived Copper-Based Oxygen Carrier Materials for Efficient Chemical-Looping Combustion of Solid Fuels with CO ₂ Capture. Energy & Fuels, 2022, 36, 11062-11076.	2.5	7
859	Intensified Chemical Looping Combustion Based Polygeneration for CO ₂ Valorization to Value-Added Chemicals (Methanol and DME). Industrial & Engineering Chemistry Research, 2022, 61, 11861-11879.	1.8	2
860	Applying a new configuration for thermal integration of ethane cracking and CLC processes to enhance the ethylene and hydrogen productions. Chemical Engineering Research and Design, 2022, 186, 672-684.	2.7	2
861	2022 Pioneers in Energy Research: Anders Lyngfelt. Energy & Fuels, 0, , .	2.5	3
862	Design of an industrial chemical looping gasification system. Fuel, 2022, 330, 125541.	3.4	3
863	Sulfur Evolution and Capture Behavior by a Solid Waste of Red Mud during Chemical Looping Combustion of Petroleum Coke. Energy & Fuels, 2022, 36, 12104-12115.	2.5	7
864	Steel slag-enhanced reforming process for blue hydrogen production from coke oven gas: Techno-economic evaluation. Journal of Cleaner Production, 2022, 379, 134778.	4.6	6
865	Investigation on minimum fluidization velocity in a modified Geldart's diagram. Chemical Engineering Journal, 2023, 453, 139984.	6.6	10
866	Research Progress and Perspectives of Solid Fuels Chemical Looping Reaction with Fe-Based Oxygen Carriers. Energy & Fuels, 2022, 36, 13956-13984.	2.5	21
867	Simulation and Optimization of a Multistage Interconnected Fluidized Bed Reactor for Coal Chemical Looping Combustion. ACS Omega, 2022, 7, 40990-41000.	1.6	2
868	A review on research and development of CFB combustion technology in China. Powder Technology, 2023, 414, 118090.	2.1	14

#	ARTICLE	IF	CITATIONS
869	Developing magnetic, durable, agglomeration resistant and reactive copper-based oxygen carrier particles by promoting a kaolin-reinforced, manganese‑iron mixed oxide support. Fuel Processing Technology, 2023, 241, 107616.	3.7	8
870	Investigation of the hydrodynamics of packed-fluidized beds: Characterization of solids flux. Fuel, 2023, 335, 127010.	3.4	2
871	Review of Carbon Capture and Methane Production from Carbon Dioxide. Atmosphere, 2022, 13, 1958.	1.0	9
872	Recent experimental advances on the utilization of biochar as a tar reforming catalyst: A review. International Journal of Hydrogen Energy, 2023, 48, 8022-8044.	3.8	14
873	Prospect of Chicken Litter as a Source of Sustainable Energy. , 2023, , 107-144.		0
874	Interaction behavior of sand-diluted and mixed Fe-based oxygen carriers with potassium salts. Fuel, 2023, 339, 127372.	3.4	5
875	Advances in the application of active metal-based sorbents and oxygen carriers in chemical looping biomass steam gasification for H2 production. International Journal of Hydrogen Energy, 2023, 48, 10394-10422.	3.8	3
876	Chemical looping reforming (CLR) for syngas production. , 2023, , 149-177.		0
877	Macroscopic analysis of chemical looping combustion with ilmenite versus conventional oxides as oxygen carriers. International Journal of Chemical Reactor Engineering, 2023, .	0.6	0
878	Carbon Capture: Materials and Process Engineering. , 2012, , 385-429.		1
879	Surface reaction mechanisms of CO with Fe-based oxygen carrier supported by CaO and K2CO3 in chemical looping combustion: Case study. Chemical Engineering Science, 2023, 271, 118564.	1.9	0
880	The exploration of NiO/Ca2Fe2O5/CaO in chemical looping methane conversion for syngas and H2 production. Chemical Engineering Journal, 2023, 465, 142779.	6.6	3
881	A review of chemical looping combustion technology: Fundamentals, and development of natural, industrial waste, and synthetic oxygen carriers. Fuel, 2023, 341, 127626.	3.4	33
882	Systematic mapping on the evaluation of electrochemical CO2 conversion to fuels/chemicals/value-added products and way forward for breakthroughs in electrocatalysis. Scientific African, 2023, 20, e01632.	0.7	2
883	Numerical investigation of a 1MW full-loop chemical looping combustion unit with dual CFB reactors. International Journal of Greenhouse Gas Control, 2023, 123, 103835.	2.3	9
884	Performance of fuel reactor in Chemical Looping Combustion system with various metal oxide particle size and operating temperature. International Journal of Thermofluids, 2023, 17, 100295.	4.0	3
885	Combining a population balance approach with detailed chemistry to model the condensation of oxide smoke during aluminum combustion in spatially homogeneous reactors. Combustion and Flame, 2023, 248, 112510.	2.8	2
886	Aspen Plus simulation of Chemical Looping Combustion of syngas and methane in fluidized beds. Discover Chemical Engineering, 2023, 3, .	1.1	1

#	Article	IF	CITATIONS
887	Enhancing the Performance of Iron Ore with Carbide Slag in the CLC Process of Coal. Combustion Science and Technology, 0, , 1-20.	1.2	0
888	Hydrogen production from biomass gasification with carbon capture and storage. , 2023, , 197-221.		0
890	The Evolution of OCAC and Its Working Principles. , 2023, , 9-17.		0
891	Cement Bonded Fine Hematite Particles and Carbide Slag as Oxygen Carriers for Chemical Looping Combustion. Energy & Fuels, 2023, 37, 5229-5240.	2.5	2
892	Review on Migration and Transformation of Lattice Oxygen during Chemical Looping Conversion: Advances and Perspectives. Energy & Fuels, 2023, 37, 5743-5756.	2.5	7
893	High-Quality Syngas Production by Chemical Looping Gasification of Bituminite Based on NiFe2O4 Oxygen Carrier. Energies, 2023, 16, 3385.	1.6	0
894	Thermal integration of styrene production process with chemical looping combustion to reduce the CO2 emission by omitting the conventional methane combustion furnaces. Chemical Engineering and Processing: Process Intensification, 2023, 189, 109379.	1.8	0
897	Chemical looping combustion (CLC) of municipal solid waste (MSW). Journal of Material Cycles and Waste Management, 2023, 25, 1900-1920.	1.6	4
919	Process Simulations and Techno-Economic Analysis with Aspen Plus. , 2024, , 17-73.		0
921	Photocatalytic Reactors for the Production of Syngas Through Natural Gas Methane. , 2024, , .		0