Francisco GarcÃ-a-Labiano

List of Publications by Year
in descending order

239 papers	17,386 citations	13099 68 h-index	17105 122 g-index
239 all docs	239 docs citations	239 times ranked	3799 citing authors

#	Article	IF	Citations
1	Qualification of operating conditions to extend oxygen carrier utilization in the scaling up of chemical looping processes. Chemical Engineering Journal, 2022, 430, 132602.	12.7	13
2	Effect of the Fe content on the behavior of synthetic oxygen carriers in a 1.5ÂkW biomass chemical looping gasification unit. Fuel, 2022, 309, 122193.	6.4	16
3	Iron-based oxygen carrier particles produced from micronized size minerals or industrial wastes. Powder Technology, 2022, 396, 637-647.	4.2	5
4	Synthesis gas and H2 production by chemical looping reforming using bio-oil from fast pyrolysis of wood as raw material. Chemical Engineering Journal, 2022, 431, 133376.	12.7	10
5	Ca-based sorbents as precursors of oxygen carriers in chemical looping combustion of sulfurous fuels. Fuel, 2022, 312, 122743.	6.4	3
6	Coal and biomass combustion with CO2 capture by CLOU process using a magnetic Fe-Mn-supported CuO oxygen carrier. Fuel, 2022, 314, 122742.	6.4	10
7	CFD Modelling of the Fuel Reactor of a Chemical Loping Combustion Plant to Be Used with Biomethane. Processes, 2022, 10, 588.	2.8	5
8	Novel magnetic manganese-iron materials for separation of solids used in high-temperature processes: Application to oxygen carriers for chemical looping combustion. Fuel, 2022, 320, 123901.	6.4	10
9	Production of hydrogen by chemical looping reforming of methane and biogas using a reactive and durable Cu-based oxygen carrier. Fuel, 2022, 322, 124250.	6.4	26
10	Influence of an Oxygen Carrier on the CH₄ Reforming Reaction Linked to the Biomass Chemical Looping Gasification Process. Energy & Fuels, 2022, 36, 9460-9469.	5.1	10
11	Evaluation of oxygen carriers based on manganeseâ€‘iron mixed oxides prepared from natural ores or industrial waste products for chemical looping processes. Fuel Processing Technology, 2022, 234, 107313.	7.2	4
12	Life cycle assessment of power-to-methane systems with CO2 supplied by the chemical looping combustion of biomass. Energy Conversion and Management, 2022, 267, 115866.	9.2	11
13	Biomass chemical looping gasification for syngas production using ilmenite as oxygen carrier in a 1.5 kWth unit. Chemical Engineering Journal, 2021, 405, 126679.	12.7	84
14	Evaluation of the redox capability of manganeseâ€‘titanium mixed oxides for thermochemical energy storage and chemical looping processes. Fuel Processing Technology, 2021, 211, 106579.	7.2	15
15	Use of bio-glycerol for the production of synthesis gas by chemical looping reforming. Fuel, 2021, 288, 119578.	6.4	11
16	Increasing energy efficiency in chemical looping combustion of methane by in-situ activation of perovskite-based oxygen carriers. Applied Energy, 2021, 287, 116557.	10.1	30
17	On the optimization of physical and chemical stability of a Cu/Al2O3 impregnated oxygen carrier for chemical looping combustion. Fuel Processing Technology, 2021, 215, 106740.	7.2	28
18	Behavior of a manganese-iron mixed oxide doped with titanium in reducing the oxygen demand for CLC of biomass. Fuel, 2021, 292, 120381.	6.4	10

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19	Cu-Mn oxygen carrier with improved mechanical resistance: Analyzing performance under CLC and CLOU environments. Fuel Processing Technology, 2021, 217, 106819.	7.2	13
20	Optimization of synthesis gas production in the biomass chemical looping gasification process operating under auto-thermal conditions. Energy, 2021, 226, 120317.	8.8	30
21	Development of a magnetic Cu-based oxygen carrier for the chemical looping with oxygen uncoupling (CLOU) process. Fuel Processing Technology, 2021, 218, 106836.	7.2	23
22	Syngas Production in a 1.5 kW_{th} Biomass Chemical Looping Gasification Unit Using Fe and Mn Ores as the Oxygen Carrier. Energy & Fuels, 2021, 35, 17182-17196.	5.1	30
23	Effect of the Presence of Siloxanes in Biogas Chemical Looping Combustion. Energy & Fuels, 2021, 35, 14984-14994.	5.1	6
24	Biomass chemical looping gasification for syngas production using LD Slag as oxygen carrier in a 1.5 kWth unit. Fuel Processing Technology, 2021, 222, 106963.	7.2	39
25	Air jet attrition measurements at hot conditions of oxygen carriers for chemical looping combustion. Powder Technology, 2021, 392, 661-671.	4.2	9
26	Coal combustion via Chemical Looping assisted by Oxygen Uncoupling with a manganeseâ€'iron mixed oxide doped with titanium. Fuel Processing Technology, 2020, 197, 106184.	7.2	33
27	Biomass Chemical Looping Gasification of pine wood using a synthetic Fe2O3/Al2O3 oxygen carrier in a continuous unit. Bioresource Technology, 2020, 316, 123908.	9.6	65
28	Performance Evaluation of a Cu-Based Oxygen Carrier Impregnated onto ZrO₂ for Chemical-Looping Combustion (CLC). Industrial & Engineering Chemistry Research, 2020, 59, 7255-7266.	3.7	27
29	Kinetics of CaMn0.775Ti0.125Mg0.1O2.9-Î´ perovskite prepared at industrial scale and its implication on the performance of chemical looping combustion of methane. Chemical Engineering Journal, 2020, 394, 124863.	12.7	23
30	Improving the oxygen demand in biomass CLC using manganese ores. Fuel, 2020, 274, 117803.	6.4	17
31	Evaluation of different strategies to improve the efficiency of coal conversion in a 50ÂkWth Chemical Looping combustion unit. Fuel, 2020, 271, 117514.	6.4	18
32	Life cycle assessment of natural gas fuelled power plants based on chemical looping combustion technology. Energy Conversion and Management, 2019, 198, 111856.	9.2	22
33	Thermochemical assessment of chemical looping assisted by oxygen uncoupling with a MnFe-based oxygen carrier. Applied Energy, 2019, 251, 113340.	10.1	20
34	Improving the efficiency of Chemical Looping Combustion with coal by using ring-type internals in the fuel reactor. Fuel, 2019, 250, 8-16.	6.4	11
35	Chemical looping with oxygen uncoupling: an advanced biomass combustion technology to avoid CO2 emissions. Mitigation and Adaptation Strategies for Global Change, 2019, 24, 1293-1306.	2.1	14
36	Comparative study of fuel-N and tar evolution in chemical looping combustion of biomass under both iG-CLC and CLOU modes. Fuel, 2019, 236, 598-607.	6.4	31

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37	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.	3.9	12
38	Reduction and oxidation kinetics of Tierga iron ore for Chemical Looping Combustion with diverse fuels. Chemical Engineering Journal, 2019, 359, 37-46.	12.7	42
39	Chemical-looping combustion: Status and research needs. Proceedings of the Combustion Institute, 2019, 37, 4303-4317.	3.9	141
40	Assessment of low-cost oxygen carrier in South-western Colombia, and its use in the in-situ gasification chemical looping combustion technology. Fuel, 2018, 218, 417-424.	6.4	23
41	Development and validation of a 1D process model with autothermal operation of a 1â€¯MW th chemical looping pilot plant. International Journal of Greenhouse Gas Control, 2018, 73, 29-41.	4.6	26
42	Assessment of the improvement of chemical looping combustion of coal by using a manganese ore as oxygen carrier. Fuel Processing Technology, 2018, 176, 107-118.	7.2	27
43	Chemical Looping Combustion of gaseous and solid fuels with manganese-iron mixed oxide as oxygen carrier. Energy Conversion and Management, 2018, 159, 221-231.	9.2	61
44	Relevance of plant design on CLC process performance using a Cu-based oxygen carrier. Fuel Processing Technology, 2018, 171, 78-88.	7.2	23
45	Chemical looping combustion of solid fuels. Progress in Energy and Combustion Science, 2018, 65, 6-66.	31.2	433
46	Chemical looping combustion of biomass: CLOU experiments with a Cu-Mn mixed oxide. Fuel Processing Technology, 2018, 172, 179-186.	7.2	61
47	Chemical Looping Combustion of different types of biomass in a 0.5 kWth unit. Fuel, 2018, 211, 868-875.	6.4	72
48	CLOU process performance with a Cu-Mn oxygen carrier in the combustion of different types of coal with CO2 capture. Fuel, 2018, 212, 605-612.	6.4	33
49	Extension and evaluation of a macroscopic model for syngas-fueled chemical looping combustion. Chemical Engineering and Processing: Process Intensification, 2018, 133, 106-116.	3.6	9
50	Negative CO2 emissions through the use of biofuels in chemical looping technology: A review. Applied Energy, 2018, 232, 657-684.	10.1	166
51	Mn-based oxygen carriers prepared by impregnation for Chemical Looping Combustion with diverse fuels. Fuel Processing Technology, 2018, 178, 236-250.	7.2	44
52	A simple model for comparative evaluation of different oxygen carriers and solid fuels in iG-CLC processes. Fuel Processing Technology, 2018, 179, 444-454.	7.2	17
53	Chemical-Looping Combustion of Kerosene and Gaseous Fuels with a Natural and a Manufactured Mnâ€“Fe-Based Oxygen Carrier. Energy & Fuels, 2018, 32, 8803-8816.	5.1	25
54	Autothermal chemical looping reforming process of different fossil liquid fuels. International Journal of Hydrogen Energy, 2017, 42, 13633-13640.	7.1	29

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55	Titanium substituted manganese-ferrite as an oxygen carrier with permanent magnetic properties for chemical looping combustion of solid fuels. Fuel, 2017, 195, 38-48.	6.4	56
56	Chemical Looping Combustion of liquid fossil fuels in a 1 kW th unit using a Fe-based oxygen carrier. Fuel Processing Technology, 2017, 160, 47-54.	7.2	32
57	Steam, dry, and steam-dry chemical looping reforming of diesel fuel in a 1 kW th unit. Chemical Engineering Journal, 2017, 325, 369-377.	12.7	26
58	Development of (Mn0.77Fe0.23)2O3 particles as an oxygen carrier for coal combustion with CO2 capture via in-situ gasification chemical looping combustion (iG-CLC) aided by oxygen uncoupling (CLOU). Fuel Processing Technology, 2017, 164, 69-79.	7.2	41
59	In situ gasification Chemical-Looping Combustion of coal using limestone as oxygen carrier precursor and sulphur sorbent. Chemical Engineering Journal, 2017, 310, 226-239.	12.7	45
60	Coal combustion with a spray granulated Cu-Mn mixed oxide for the Chemical Looping with Oxygen Uncoupling (CLOU) process. Applied Energy, 2017, 208, 561-570.	10.1	23
61	Mercury emissions from coal combustion in fluidized beds under oxy-fuel and air conditions: Influence of coal characteristics and O2 concentration. Fuel Processing Technology, 2017, 167, 695-701.	7.2	6
62	Spray granulated Cu-Mn oxygen carrier for chemical looping with oxygen uncoupling (CLOU) process. International Journal of Greenhouse Gas Control, 2017, 65, 76-85.	4.6	24
63	Combustion and Reforming of Liquid Fossil Fuels through Chemical Looping Processes: Integration of Chemical Looping Processes in a Refinery. Energy Procedia, 2017, 114, 325-333.	1.8	15
64	Comparative Evaluation of the Performance of Coal Combustion in 0.5 and 50 kWth Chemical Looping Combustion Units with Ilmenite, Redmud or Iron Ore as Oxygen Carrier. Energy Procedia, 2017, 114, 285-301.	1.8	26
65	Chemical Looping Combustion of Biomass: An Approach to BECCS. Energy Procedia, 2017, 114, 6021-6029.	1.8	22
66	Promising Impregnated Mn-based Oxygen Carriers for Chemical Looping Combustion of Gaseous Fuels. Energy Procedia, 2017, 114, 334-343.	1.8	16
67	Evaluation of (MnxFe1-x)2TiyOz Particles as Oxygen Carrier for Chemical Looping Combustion. Energy Procedia, 2017, 114, 302-308.	1.8	6
68	Mercury capture by a structured Au/C regenerable sorbent under oxycoal combustion representative and real conditions. Fuel, 2017, 207, 821-829.	6.4	16
69	Tar abatement for clean syngas production during biomass gasification in a dual fluidized bed. Fuel Processing Technology, 2016, 152, 116-123.	7.2	40
70	Process Comparison for Biomass Combustion: Inâ€…Situ Gasificationâ€Chemical Looping Combustion (iGâ€CLC) versus Chemical Looping with Oxygen Uncoupling (CLOU). Energy Technology, 2016, 4, 1130-1136.	3.8	50
71	On the attrition evaluation of oxygen carriers in Chemical Looping Combustion. Fuel Processing Technology, 2016, 148, 188-197.	7.2	102
72	Manganese Minerals as Oxygen Carriers for Chemical Looping Combustion of Coal. Industrial & Engineering Chemistry Research, 2016, 55, 6539-6546.	3.7	38

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73	Long-lasting Cu-based oxygen carrier material for industrial scale in Chemical Looping Combustion. International Journal of Greenhouse Gas Control, 2016, 52, 120-129.	4.6	60
74	Use of Hopcalite-Derived Cuâ€“Mn Mixed Oxide as Oxygen Carrier for Chemical Looping with Oxygen Uncoupling Process. Energy & Fuels, 2016, 30, 5953-5963.	5.1	26
75	Sulphuric acid production via Chemical Looping Combustion of elemental sulphur. Applied Energy, 2016, 178, 736-745.	10.1	36
76	Coal combustion in a 50kWth Chemical Looping Combustion unit: Seeking operating conditions to maximize CO2 capture and combustion efficiency. International Journal of Greenhouse Gas Control, 2016, 50, 80-92.	4.6	69
77	Tar abatement in a fixed bed catalytic filter candle during biomass gasification in a dual fluidized bed. Applied Catalysis B: Environmental, 2016, 188, 198-206.	20.2	32
78	Optimization of hydrogen production with CO2 capture by autothermal chemical-looping reforming using different bioethanol purities. Applied Energy, 2016, 169, 491-498.	10.1	32
79	Sulphur, nitrogen and mercury emissions from coal combustion with CO2 capture in chemical looping with oxygen uncoupling (CLOU). International Journal of Greenhouse Gas Control, 2016, 46, 28-38.	4.6	55
80	The fate of mercury in fluidized beds under oxy-fuel combustion conditions. Fuel, 2016, 167, 75-81.	6.4	18
81	Bioethanol combustion with CO2 capture in a 1kWth Chemical Looping Combustion prototype: Suitability of the oxygen carrier. Chemical Engineering Journal, 2016, 283, 1405-1413.	12.7	26
82	Characterization for disposal of Fe-based oxygen carriers from a CLC unit burning coal. Fuel Processing Technology, 2015, 138, 750-757.	7.2	23
83	Characterization of a solâ€“gel derived CuO/CuAl2O4 oxygen carrier for chemical looping combustion (CLC) of gaseous fuels: Relevance of gasâ€“solid and oxygen uncoupling reactions. Fuel Processing Technology, 2015, 133, 210-219.	7.2	49
84	Redox kinetics of CaMg0.1Ti0.125Mn0.775O2.9â^'Î´ for Chemical Looping Combustion (CLC) and Chemical Looping with Oxygen Uncoupling (CLOU). Chemical Engineering Journal, 2015, 269, 67-81.	12.7	61
85	Design and operation of a 50 kWth Chemical Looping Combustion (CLC) unit for solid fuels. Applied Energy, 2015, 157, 295-303.	10.1	85
86	Conceptual design of a 100 MWth CLC unit for solid fuel combustion. Applied Energy, 2015, 157, 462-474.	10.1	61
87	Performance of a low-cost iron ore as an oxygen carrier for Chemical Looping Combustion of gaseous fuels. Chemical Engineering Research and Design, 2015, 93, 736-746.	5.6	49
88	NO and N 2 O emissions in oxy-fuel combustion of coal in a bubbling fluidized bed combustor. Fuel, 2015, 150, 146-153.	6.4	54
89	Syngas/H2 production from bioethanol in a continuous chemical-looping reforming prototype. Fuel Processing Technology, 2015, 137, 24-30.	7.2	36
90	Morphological analysis of sulfated Ca-based sorbents under conditions corresponding to oxy-fuel fluidized bed combustion. Fuel, 2015, 162, 264-270.	6.4	10

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91	Evaluation of Manganese Minerals for Chemical Looping Combustion. Energy & Fuels, 2015, 29, 6605-6615.	5.1	54
92	Combustion and Reforming of Ethanol in a Chemical Looping Continuous Unit. Energy Procedia, 2014, 63, 53-62.	1.8	11
93	Design and Operation of a Coal-fired 50 kWth Chemical Looping Combustor. Energy Procedia, 2014, 63, 63-72.	1.8	30
94	On a Highly Reactive Fe₂O₃/Al₂O₃ Oxygen Carrier for in Situ Gasification Chemical Looping Combustion. Energy & Fuels, 2014, 28, 7043-7052.	5.1	37
95	The fate of sulphur in the Cu-based Chemical Looping with Oxygen Uncoupling (CLOU) Process. Applied Energy, 2014, 113, 1855-1862.	10.1	66
96	Performance of a highly reactive impregnated Fe2O3/Al2O3 oxygen carrier with CH4 and H2S in a 500Wth CLC unit. Fuel, 2014, 121, 117-125.	6.4	99
97	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.	12.7	103
98	Mercury Release and Speciation in Chemical Looping Combustion of Coal. Energy & Fuels, 2014, 28, 2786-2794.	5.1	34
99	Energy exploitation of acid gas with high H2S content by means of a chemical looping combustion system. Applied Energy, 2014, 136, 242-249.	10.1	31
100	Kinetic analysis of a Cu-based oxygen carrier: Relevance of temperature and oxygen partial pressure on reduction and oxidation reactions rates in Chemical Looping with Oxygen Uncoupling (CLOU). Chemical Engineering Journal, 2014, 256, 69-84.	12.7	96
101	Performance of Cu- and Fe-based oxygen carriers in a 500 W th CLC unit for sour gas combustion with high H 2 S content. International Journal of Greenhouse Gas Control, 2014, 28, 168-179.	4.6	64
102	Reduction and Oxidation Kinetics of a CaMn_{0.9}Mg_{0.1}O_{3â˜Î´} Oxygen Carrier for Chemical-Looping Combustion. Industrial & Engineering Chemistry Research, 2014, 53, 87-103.	3.7	70
103	Biomass combustion with CO2 capture by chemical looping with oxygen uncoupling (CLOU). Fuel Processing Technology, 2014, 124, 104-114.	7.2	129
104	Sulfur retention in an oxy-fuel bubbling fluidized bed combustor: Effect of coal rank, type of sorbent and O 2 /CO 2 ratio. Fuel, 2014, 137, 384-392.	6.4	27
105	Effect of Operating Conditions and H₂S Presence on the Performance of CaMg_{0.1}Mn_{0.9}O_{3â˜Î´} Perovskite Material in Chemical Looping Combustion (CLC). Energy & Fuels, 2014, 28, 1262-1274.	5.1	54
106	On the use of a highly reactive iron ore in Chemical Looping Combustion of different coals. Fuel, 2014, 126, 239-249.	6.4	95
107	Release of pollutant components in CLC of lignite. International Journal of Greenhouse Gas Control, 2014, 22, 15-24.	4.6	65
108	Relevance of the catalytic activity on the performance of a NiO/CaAl2O4 oxygen carrier in a CLC process. Applied Catalysis B: Environmental, 2014, 147, 980-987.	20.2	35

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109	Assessment of technological solutions for improving chemical looping combustion of solid fuels with CO2 capture. Chemical Engineering Journal, 2013, 233, 56-69.	12.7	76
110	Use of chemically and physically mixed iron and nickel oxides as oxygen carriers for gas combustion in a CLC process. Fuel Processing Technology, 2013, 115, 152-163.	7.2	44
111	Optimum temperature for sulphur retention in fluidised beds working under oxy-fuel combustion conditions. Fuel, 2013, 114, 106-113.	6.4	53
112	Evaluation of a highly reactive and sulfur resistant synthetic Fe-based oxygen carrier for CLC using gaseous fuels. Energy Procedia, 2013, 37, 580-587.	1.8	4
113	Performance of a low Ni content oxygen carrier for fuel gas combustion in a continuous CLC unit using a CaO/Al2O3 system as support. International Journal of Greenhouse Gas Control, 2013, 14, 209-219.	4.6	22
114	Modeling of Limestone Sulfation for Typical Oxy-Fuel Fluidized Bed Combustion Conditions. Energy & Fuels, 2013, 27, 2266-2274.	5.1	23
115	Fuel reactor model validation: Assessment of the key parameters affecting the chemical-looping combustion of coal. International Journal of Greenhouse Gas Control, 2013, 19, 541-551.	4.6	59
116	Performance of a bauxite waste as oxygen-carrier for chemical-looping combustion using coal as fuel. Fuel Processing Technology, 2013, 109, 57-69.	7.2	62
117	Effects of Temperature and Flue Gas Recycle on the SO2 and NOx Emissions in an Oxy-fuel Fluidized Bed Combustor. Energy Procedia, 2013, 37, 1275-1282.	1.8	29
118	Performance of CLOU process in the combustion of different types of coal with CO2 capture. International Journal of Greenhouse Gas Control, 2013, 12, 430-440.	4.6	88
119	Optimization of H2 production with CO2 capture by steam reforming of methane integrated with a chemical-looping combustion system. International Journal of Hydrogen Energy, 2013, 38, 11878-11892.	7.1	34
120	Use of Chemical-Looping processes for coal combustion with CO2 capture. Energy Procedia, 2013, 37, 540-549.	1.8	41
121	Fuel reactor modelling in chemical-looping combustion of coal: 1. model formulation. Chemical Engineering Science, 2013, 87, 277-293.	3.8	104
122	Evaluation of the use of different coals in Chemical Looping Combustion using a bauxite waste as oxygen carrier. Fuel, 2013, 106, 814-826.	6.4	67
123	Biomass combustion in a CLC system using an iron ore as an oxygen carrier. International Journal of Greenhouse Gas Control, 2013, 19, 322-330.	4.6	109
124	Fuel reactor modelling in chemical-looping combustion of coal: 2â€”simulation and optimization. Chemical Engineering Science, 2013, 87, 173-182.	3.8	67
125	Behaviour of a bauxite waste material as oxygen carrier in a 500Wth CLC unit with coal. International Journal of Greenhouse Gas Control, 2013, 17, 170-182.	4.6	64
126	Pollutant emissions in a bubbling fluidized bed combustor working in oxy-fuel operating conditions: Effect of flue gas recirculation. Applied Energy, 2013, 102, 860-867.	10.1	61

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127	Investigation of Combined Supports for Cu-Based Oxygen Carriers for Chemical-Looping with Oxygen Uncoupling (CLOU). Energy & Fuels, 2013, 27, 3918-3927.	5.1	65
128	Catalytic Activity of Ni-Based Oxygen-Carriers for Steam Methane Reforming in Chemical-Looping Processes. Energy & Fuels, 2012, 26, 791-800.	5.1	89
129	Low-Cost Fe-Based Oxygen Carrier Materials for the iG-CLC Process with Coal. 1. Industrial & Engineering Chemistry Research, 2012, 51, 16216-16229.	3.7	77
130	Use of an Fe-Based Residue from Alumina Production as an Oxygen Carrier in Chemical-Looping Combustion. Energy & Fuels, 2012, 26, 1420-1431.	5.1	73
131	Low-Cost Fe-Based Oxygen Carrier Materials for the iG-CLC Process with Coal. 2. Industrial & Engineering Chemistry Research, 2012, 51, 16230-16241.	3.7	33
132	Evaluation of a Spray-Dried CuO/MgAl₂O₄ Oxygen Carrier for the Chemical Looping with Oxygen Uncoupling Process. Energy & Fuels, 2012, 26, 3069-3081.	5.1	111
133	Effect of operating conditions in Chemical-Looping Combustion of coal in a 500Wth unit. International Journal of Greenhouse Gas Control, 2012, 6, 153-163.	4.6	84
134	Demonstration of chemical-looping with oxygen uncoupling (CLOU) process in a 1.5kWth continuously operating unit using a Cu-based oxygen-carrier. International Journal of Greenhouse Gas Control, 2012, 6, 189-200.	4.6	234
135	Effect of H2S on the behaviour of an impregnated NiO-based oxygen-carrier for chemical-looping combustion (CLC). Applied Catalysis B: Environmental, 2012, 126, 186-199.	20.2	50
136	Identification of operational regions in the Chemical-Looping with Oxygen Uncoupling (CLOU) process with a Cu-based oxygen carrier. Fuel, 2012, 102, 634-645.	6.4	70
137	Reduction and oxidation kinetics of nickel-based oxygen-carriers for chemical-looping combustion and chemical-looping reforming. Chemical Engineering Journal, 2012, 188, 142-154.	12.7	163
138	Relevance of the coal rank on the performance of the in situ gasification chemical-looping combustion. Chemical Engineering Journal, 2012, 195-196, 91-102.	12.7	96
139	Development of Cu-based oxygen carriers for Chemical-Looping with Oxygen Uncoupling (CLOU) process. Fuel, 2012, 96, 226-238.	6.4	198
140	Prompt considerations on the design of Chemical-Looping Combustion of coal from experimental tests. Fuel, 2012, 97, 219-232.	6.4	69
141	Theoretical approach on the CLC performance with solid fuels: Optimizing the solids inventory. Fuel, 2012, 97, 536-551.	6.4	59
142	Behavior of ilmenite as oxygen carrier in chemical-looping combustion. Fuel Processing Technology, 2012, 94, 101-112.	7.2	210
143	Testing of a highly reactive impregnated Fe2O3/Al2O3 oxygen carrier for a SRâ€“CLC system in a continuous CLC unit. Fuel Processing Technology, 2012, 96, 37-47.	7.2	67
144	Effect of Feâ€“olivine on the tar content during biomass gasification in a dual fluidized bed. Applied Catalysis B: Environmental, 2012, 121-122, 214-222.	20.2	163

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145	Progress in Chemical-Looping Combustion and Reforming technologies. Progress in Energy and Combustion Science, 2012, 38, 215-282.	31.2	1,865
146	Influence of Limestone Addition in a 10 kW_{th} Chemical-Looping Combustion Unit Operated with Petcoke. Energy & Fuels, 2011, 25, 4818-4828.	5.1	59
147	High temperature behaviour of a CuO/Î³Al2O3 oxygen carrier for chemical-looping combustion. International Journal of Greenhouse Gas Control, 2011, 5, 659-667.	4.6	104
148	Characterization of a limestone in a batch fluidized bed reactor for sulfur retention under oxy-fuel operating conditions. International Journal of Greenhouse Gas Control, 2011, 5, 1190-1198.	4.6	44
149	The use of ilmenite as oxygen-carrier in a 500Wth Chemical-Looping Coal Combustion unit. International Journal of Greenhouse Gas Control, 2011, 5, 1630-1642.	4.6	168
150	Effect of Support on the Behavior of Cu-Based Oxygen Carriers during Long-Term CLC Operation at Temperatures above 1073 K. Energy & Fuels, 2011, 25, 1316-1326.	5.1	97
151	Optimization of hydrogen production by Chemical-Looping auto-thermal Reforming working with Ni-based oxygen-carriers. International Journal of Hydrogen Energy, 2011, 36, 9663-9672.	7.1	100
152	Hydrogen production with CO2 capture by coupling steam reforming of methane and chemical-looping combustion: Use of an iron-based waste product as oxygen carrier burning a PSA tail gas. Journal of Power Sources, 2011, 196, 4370-4381.	7.8	97
153	Kinetics of redox reactions of ilmenite for chemical-looping combustion. Chemical Engineering Science, 2011, 66, 689-702.	3.8	274
154	Ilmenite as oxygen carrier in a chemical looping combustion system with coal. Energy Procedia, 2011, 4, 362-369.	1.8	38
155	Development of CuO-based oxygen-carrier materials suitable for Chemical-Looping with Oxygen Uncoupling (CLOU) process. Energy Procedia, 2011, 4, 417-424.	1.8	72
156	Optimization of a chemical-looping auto-thermal reforming system working with a Ni-based oxygen-carrier. Energy Procedia, 2011, 4, 425-432.	1.8	4
157	Calcium-based sorbents behaviour during sulphation at oxy-fuel fluidised bed combustion conditions. Fuel, 2011, 90, 3100-3108.	6.4	63
158	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.	4.6	46
159	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.	4.6	98
160	Reactivity of a NiO/Al2O3 oxygen carrier prepared by impregnation for chemical-looping combustion. Fuel, 2010, 89, 3399-3409.	6.4	88
161	Hydrogen production by auto-thermal chemical-looping reforming in a pressurized fluidized bed reactor using Ni-based oxygen carriers. International Journal of Hydrogen Energy, 2010, 35, 151-160.	7.1	117
162	Modeling of the chemical-looping combustion of methane using a Cu-based oxygen-carrier. Combustion and Flame, 2010, 157, 602-615.	5.2	118

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163	Ilmenite Activation during Consecutive Redox Cycles in Chemical-Looping Combustion. Energy & Fuels, 2010, 24, 1402-1413.	5.1	277
164	Syngas combustion in a chemical-looping combustion system using an impregnated Ni-based oxygen carrier. Fuel, 2009, 88, 2357-2364.	6.4	96
165	NiO/Al2O3 oxygen carriers for chemical-looping combustion prepared by impregnation and depositionâ€“precipitation methods. Fuel, 2009, 88, 1016-1023.	6.4	108
166	Syngas combustion in a 500ÂWth Chemical-Looping Combustion system using an impregnated Cu-based oxygen carrier. Fuel Processing Technology, 2009, 90, 1471-1479.	7.2	113
167	Hydrogen production by chemical-looping reforming in a circulating fluidized bed reactor using Ni-based oxygen carriers. Journal of Power Sources, 2009, 192, 27-34.	7.8	171
168	Synthesis gas generation by chemical-looping reforming using a Nibased oxygen carrier. Energy Procedia, 2009, 1, 3-10.	1.8	45
169	Effect of gas impurities on the behavior of Ni-based oxygen carriers on chemical-looping combustion. Energy Procedia, 2009, 1, 11-18.	1.8	19
170	Modeling of the chemical-looping combustion of methane using a Cu-based oxygen carrier. Energy Procedia, 2009, 1, 391-398.	1.8	10
171	Methane Combustion in a 500 W_{th} Chemical-Looping Combustion System Using an Impregnated Ni-Based Oxygen Carrier. Energy & Fuels, 2009, 23, 130-142.	5.1	134
172	Effect of Fuel Gas Composition in Chemical-Looping Combustion with Ni-Based Oxygen Carriers. 1. Fate of Sulfur. Industrial & Engineering Chemistry Research, 2009, 48, 2499-2508.	3.7	99
173	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.	3.7	43
174	Synthesis gas generation by chemical-looping reforming in a batch fluidized bed reactor using Ni-based oxygen carriers. Chemical Engineering Journal, 2008, 144, 289-298.	12.7	146
175	Using continuous and pulse experiments to compare two promising nickel-based oxygen carriers for use in chemical-looping technologies. Fuel, 2008, 87, 988-1001.	6.4	84
176	Effect of support on reactivity and selectivity of Ni-based oxygen carriers for chemical-looping combustion. Fuel, 2008, 87, 2641-2650.	6.4	152
177	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.	4.6	166
178	Reaction Kinetics of Freeze-Granulated NiO/MgAl2O4Oxygen Carrier Particles for Chemical-Looping Combustion. Energy & Fuels, 2007, 21, 610-618.	5.1	91
179	Reduction Kinetics of Cu-, Ni-, and Fe-Based Oxygen Carriers Using Syngas (CO + H2) for Chemical-Looping Combustion. Energy & Fuels, 2007, 21, 1843-1853.	5.1	217
180	Solid Waste Management of a Chemical-Looping Combustion Plant using Cu-Based Oxygen Carriers. Environmental Science & Technology, 2007, 41, 5882-5887.	10.0	37

#	Article	IF	Citations
181	Operation of a 10kWth chemical-looping combustor during 200h with a CuOâ€“Al2O3 oxygen carrier. Fuel, 2007, 86, 1036-1045.	6.4	261
182	Chemical-looping combustion using syngas as fuel. International Journal of Greenhouse Gas Control, 2007, 1, 158-169.	4.6	139
183	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.	3.8	546
184	Reduction and oxidation kinetics of Mn3O4/Mgâ€“ZrO2 oxygen carrier particles for chemical-looping combustion. Chemical Engineering Science, 2007, 62, 6556-6567.	3.8	136
185	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.	5.1	68
186	Nickelâ^'Copper Oxygen Carriers To Reach Zero CO and H2Emissions in Chemical-Looping Combustion. Industrial & Engineering Chemistry Research, 2006, 45, 2617-2625.	3.7	102
187	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.	3.7	39
188	Chemical Looping Combustion in a 10 kWth Prototype Using a CuO/Al2O3 Oxygen Carrier:â€‰ Effect of Operating Conditions on Methane Combustion. Industrial & Engineering Chemistry Research, 2006, 45, 6075-6080.	3.7	270
189	Effect of Pressure on the Behavior of Copper-, Iron-, and Nickel-Based Oxygen Carriers for Chemical-Looping Combustion. Energy & Fuels, 2006, 20, 26-33.	5.1	214
190	HS retention with Ca-based sorbents in a pressurized fixed-bed reactor: application to moving-bed design. Fuel, 2005, 84, 533-542.	6.4	13
191	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.	3.8	138
192	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.	10.0	57
193	Impregnated CuO/Al2O3Oxygen Carriers for Chemical-Looping Combustion:â€‰ Avoiding Fluidized Bed Agglomeration. Energy & Fuels, 2005, 19, 1850-1856.	5.1	226
194	Development of Oxygen Carriers for Chemical-Looping Combustion. , 2005, , 587-604.		16
195	Circulating fluidised bed co-combustion of coal and biomass. Fuel, 2004, 83, 277-286.	6.4	75
196	Development of Cu-based oxygen carriers for chemical-looping combustion. Fuel, 2004, 83, 1749-1757.	6.4	335
197	Effect of pore geometry on the sintering of Ca-based sorbents during calcination at high temperatures. Fuel, 2004, 83, 1733-1742.	6.4	30
198	Effect of Pressure on the Sulfidation of Calcined Calcium-Based Sorbents. Energy & Fuels, 2004, 18, 761-769.	5.1	19

#	Article	IF	Citations
199	Hot Coal-Gas Desulfurization with Calcium-Based Sorbents in a Pressurized Moving-Bed Reactor. Energy & Fuels, 2004, 18, 1543-1554.	5.1	22
200	Simultaneous Calcination and Sulfidation of Calcium-Based Sorbents. Industrial & Engineering Chemistry Research, 2004, 43, 3261-3269.	3.7	24
201	Direct Sulfidation of Half-Calcined Dolomite under Pressurized Conditions. Industrial & Engineering Chemistry Research, 2004, 43, 4132-4139.	3.7	10
202	Selection of Oxygen Carriers for Chemical-Looping Combustion. Energy & Fuels, 2004, 18, 371-377.	5.1	646
203	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.	3.7	210
204	Author's response to the comments by M. Hartman and O. Trnka. Chemical Engineering Science, 2003, 58, 3301.	3.8	0
205	Progress of Sulfation in Highly Sulfated Particles of Lime. Industrial & Engineering Chemistry Research, 2003, 42, 1840-1844.	3.7	17
206	Combustion of Wood Chips in a CFBC. Modeling and Validation. Industrial & Engineering Chemistry Research, 2003, 42, 987-999.	3.7	33
207	Effect of Moisture Content on Devolatilization Times of Pine Wood Particles in a Fluidized Bed. Energy & Fuels, 2003, 17, 285-290.	5.1	19
208	Optimizing the Fuel Reactor for Chemical Looping Combustion. , 2003, , 173.		13
209	Co-Combustion of Biomass and Coal in Circulating Fluidized Bed: Modeling and Validation. , 2003, , .		4
210	Modeling of the Devolatilization of Nonspherical Wet Pine Wood Particles in Fluidized Beds. Industrial & Engineering Chemistry Research, 2002, 41, 3642-3650.	3.7	49
211	Coupled drying and devolatilisation of non-spherical wet pine wood particles in fluidised beds. Journal of Analytical and Applied Pyrolysis, 2002, 65, 173-184.	5.5	22
212	Calcination of calcium-based sorbents at pressure in a broad range of CO2 concentrations. Chemical Engineering Science, 2002, 57, 2381-2393.	3.8	241
213	Determination of Biomass Char Combustion Reactivities for FBC Applications by a Combined Method. Industrial & Engineering Chemistry Research, 2001, 40, 4317-4323.	3.7	62
214	Regeneration of Sulfided Dolomite with Steam and Carbon Dioxide. Energy & Fuels, 2001, 15, 85-94.	5.1	10
215	Residual activity of sorbent particles with a long residence time in a CFBC. AICHE Journal, 2000, 46, 1888-1893.	3.6	24
216	Modelling for the high-temperature sulphation of calcium-based sorbents with cylindrical and plate-like pore geometries. Chemical Engineering Science, 2000, 55, 3665-3683.	3.8	32

#	Article	IF	Citations
217	Calcination of calcium acetate and calcium magnesium acetate: effect of the reacting atmosphere. Fuel, 1999, 78, 583-592.	6.4	51
218	Utilization of Calcium Acetate and Calcium Magnesium Acetate for H2S Removal in Coal Gas Cleaning at High Temperatures. Energy & Fuels, 1999, 13, 440-448.	5.1	21
219	Factors Affecting the H2S Reaction with Noncalcined Limestones and Half-Calcined Dolomites. Energy & Fuels, 1999, 13, 146-153.	5.1	22
220	Effectiveness of Natural, Commercial, and Modified Calcium-Based Sorbents as H2S Removal Agents at High Temperatures. Environmental Science & Technology, 1999, 33, 288-293.	10.0	15
221	H2S Removal in Entrained Flow Reactors by Injection of Ca-Based Sorbents at High Temperatures. Energy & Fuels, 1998, 12, 726-733.	5.1	18
222	Kinetics of H2S Reaction with Calcined Calcium-Based Sorbents. Energy & Fuels, 1998, 12, 617-625.	5.1	23
223	Study of modified calcium hydroxides for enhancing SO2 removal during sorbent injection in pulverized coal boilers. Fuel, 1997, 76, 257-265.	6.4	50
224	Comparison of Mechanistic Models for the Sulfation Reaction in a Broad Range of Particle Sizes of Sorbents. Industrial & Engineering Chemistry Research, 1996, 35, 2190-2197.	3.7	33
225	Sulfur release during the devolatilization of large coal particles. Fuel, 1996, 75, 585-590.	6.4	19
226	The effect of the porous structure on sorbent sulfation under coal-fired boiler conditions. Thermochimica Acta, 1996, 277, 151-164.	2.7	11
227	Sorbent characterization for boiler injection process. Coal Science and Technology, 1995, , 1819-1822.	0.0	0
228	Sulphur retention in circulating fluidized bed coal combustion. Modelling and simulation. Coal Science and Technology, 1995, 24, 1839-1842.	0.0	5
229	Modeling of sulphur retention in atmospheric fluidized bed combustors. Sensitivity analysis and simulation. Chemical Engineering and Technology, 1995, 18, 229-242.	1.5	1
230	Determination of sulfur release and its kinetics in rapid pyrolysis of coal. Fuel, 1995, 74, 1072-1079.	6.4	64
231	Axial voidage profiles in fast fluidized beds. Powder Technology, 1994, 81, 259-268.	4.2	58
232	Sulfur retention in AFBC. Modelling and sorbent characterization methods. Fuel Processing Technology, 1993, 36, 73-79.	7.2	7
233	Factors affecting the thermogravimetric technique in the characterization of sorbents for AFBC. Thermochimica Acta, 1993, 217, 99-113.	2.7	10
234	Modeling of lignite combustion in atmospheric fluidized bed combustors. 2. Model validation and simulation. Industrial & Engineering Chemistry Research, 1992, 31, 2296-2303.	3.7	4

#	Article	IF	Citations
235	Carbon efficiency in atmospheric fluidized bed combustion of lignites. Fuel, 1992, 71, 417-424.	6.4	5
236	Characterization of the reactivity of limestones with SO₂ in a fluidized bed reactor. Canadian Journal of Chemical Engineering, 1992, 70, 734-741.	1.7	8
237	Modeling of moving-bed coal gasifiers. Industrial & Engineering Chemistry Research, 1990, 29, 2079-2088.	3.7	19
238	Operational Experience of Biomass Combustion Using Chemical Looping Processes. , 0, , .		0
239	Chemical Looping Combustion of Biomass: Clou Experiments with a Cu-Mn Mixed Oxide. , 0, , .		0