

# Pilar Gayan

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

188  
papers

13,137  
citations

62  
h-index

109  
g-index

189  
ext. papers

14,489  
ext. citations

6.9  
avg, IF

6.43  
L-index

#	Paper	IF	Citations
188	Coal and biomass combustion with CO <sub>2</sub> capture by CLOU process using a magnetic Fe-Mn-supported CuO oxygen carrier. <i>Fuel</i> , <b>2022</b> , 314, 122742	7.1	0
187	Ca-based sorbents as precursors of oxygen carriers in chemical looping combustion of sulfurous fuels. <i>Fuel</i> , <b>2022</b> , 312, 122743	7.1	0
186	Novel magnetic manganese-iron materials for separation of solids used in high-temperature processes: Application to oxygen carriers for chemical looping combustion. <i>Fuel</i> , <b>2022</b> , 320, 123901	7.1	0
185	Increasing energy efficiency in chemical looping combustion of methane by in-situ activation of perovskite-based oxygen carriers. <i>Applied Energy</i> , <b>2021</b> , 287, 116557	10.7	8
184	On the optimization of physical and chemical stability of a Cu/Al <sub>2</sub> O <sub>3</sub> impregnated oxygen carrier for chemical looping combustion. <i>Fuel Processing Technology</i> , <b>2021</b> , 215, 106740	7.2	10
183	Evaluation of the redox capability of manganese-titanium mixed oxides for thermochemical energy storage and chemical looping processes. <i>Fuel Processing Technology</i> , <b>2021</b> , 211, 106579	7.2	8
182	Development of a magnetic Cu-based oxygen carrier for the chemical looping with oxygen uncoupling (CLOU) process. <i>Fuel Processing Technology</i> , <b>2021</b> , 218, 106836	7.2	7
181	Qualification of operating conditions to extend oxygen carrier utilization in the scaling up of chemical looping processes. <i>Chemical Engineering Journal</i> , <b>2021</b> , 132602	14.7	3
180	Performance Evaluation of a Cu-Based Oxygen Carrier Impregnated onto ZrO <sub>2</sub> for Chemical-Looping Combustion (CLC). <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 7255-7268	3.9	12
179	Kinetics of CaMn <sub>0.775</sub> Ti <sub>0.125</sub> Mg <sub>0.1</sub> O <sub>2.9</sub> -perovskite prepared at industrial scale and its implication on the performance of chemical looping combustion of methane. <i>Chemical Engineering Journal</i> , <b>2020</b> , 394, 124863	14.7	12
178	Coal combustion via Chemical Looping assisted by Oxygen Uncoupling with a manganese-iron mixed oxide doped with titanium. <i>Fuel Processing Technology</i> , <b>2020</b> , 197, 106184	7.2	22
177	Evaluation of different strategies to improve the efficiency of coal conversion in a 50kWth Chemical Looping combustion unit. <i>Fuel</i> , <b>2020</b> , 271, 117514	7.1	13
176	Thermochemical assessment of chemical looping assisted by oxygen uncoupling with a MnFe-based oxygen carrier. <i>Applied Energy</i> , <b>2019</b> , 251, 113340	10.7	15
175	Evaluation of Mn-Fe mixed oxide doped with TiO <sub>2</sub> for the combustion with CO <sub>2</sub> capture by Chemical Looping assisted by Oxygen Uncoupling. <i>Applied Energy</i> , <b>2019</b> , 237, 822-835	10.7	21
174	Improving the efficiency of Chemical Looping Combustion with coal by using ring-type internals in the fuel reactor. <i>Fuel</i> , <b>2019</b> , 250, 8-16	7.1	8
173	Chemical looping with oxygen uncoupling: an advanced biomass combustion technology to avoid CO <sub>2</sub> emissions. <i>Mitigation and Adaptation Strategies for Global Change</i> , <b>2019</b> , 24, 1293-1306	3.9	8
172	Comparative study of fuel-N and tar evolution in chemical looping combustion of biomass under both iG-CLC and CLOU modes. <i>Fuel</i> , <b>2019</b> , 236, 598-607	7.1	19

171	Modelling Chemical-Looping assisted by Oxygen Uncoupling (CLaOU): Assessment of natural gas combustion with calcium manganite as oxygen carrier. <i>Proceedings of the Combustion Institute</i> , <b>2019</b> , 37, 4361-4369	5.9	7
170	Reduction and oxidation kinetics of Tierga iron ore for Chemical Looping Combustion with diverse fuels. <i>Chemical Engineering Journal</i> , <b>2019</b> , 359, 37-46	14.7	23
169	Assessment of the improvement of chemical looping combustion of coal by using a manganese ore as oxygen carrier. <i>Fuel Processing Technology</i> , <b>2018</b> , 176, 107-118	7.2	21
168	Chemical Looping Combustion of gaseous and solid fuels with manganese-iron mixed oxide as oxygen carrier. <i>Energy Conversion and Management</i> , <b>2018</b> , 159, 221-231	10.6	44
167	Relevance of plant design on CLC process performance using a Cu-based oxygen carrier. <i>Fuel Processing Technology</i> , <b>2018</b> , 171, 78-88	7.2	16
166	Chemical looping combustion of solid fuels. <i>Progress in Energy and Combustion Science</i> , <b>2018</b> , 65, 6-66	33.6	305
165	Chemical looping combustion of biomass: CLOU experiments with a Cu-Mn mixed oxide. <i>Fuel Processing Technology</i> , <b>2018</b> , 172, 179-186	7.2	51
164	Chemical Looping Combustion of different types of biomass in a 0.5 kWth unit. <i>Fuel</i> , <b>2018</b> , 211, 868-875	7.1	51
163	A simple model for comparative evaluation of different oxygen carriers and solid fuels in iG-CLC processes. <i>Fuel Processing Technology</i> , <b>2018</b> , 179, 444-454	7.2	14
162	CLOU process performance with a Cu-Mn oxygen carrier in the combustion of different types of coal with CO <sub>2</sub> capture. <i>Fuel</i> , <b>2018</b> , 212, 605-612	7.1	23
161	Fe <sub>2</sub> O <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> oxygen carrier materials for chemical looping combustion, a redox thermodynamic and thermogravimetric evaluation in the presence of H <sub>2</sub> S. <i>Journal of Thermal Analysis and Calorimetry</i> , <b>2018</b> , 134, 1739-1748	4.1	5
160	Negative CO <sub>2</sub> emissions through the use of biofuels in chemical looping technology: A review. <i>Applied Energy</i> , <b>2018</b> , 232, 657-684	10.7	93
159	Mn-based oxygen carriers prepared by impregnation for Chemical Looping Combustion with diverse fuels. <i>Fuel Processing Technology</i> , <b>2018</b> , 178, 236-250	7.2	28
158	Autothermal chemical looping reforming process of different fossil liquid fuels. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 13633-13640	6.7	21
157	Titanium substituted manganese-ferrite as an oxygen carrier with permanent magnetic properties for chemical looping combustion of solid fuels. <i>Fuel</i> , <b>2017</b> , 195, 38-48	7.1	39
156	Chemical Looping Combustion of liquid fossil fuels in a 1 kW th unit using a Fe-based oxygen carrier. <i>Fuel Processing Technology</i> , <b>2017</b> , 160, 47-54	7.2	26
155	Steam, dry, and steam-dry chemical looping reforming of diesel fuel in a 1 kW th unit. <i>Chemical Engineering Journal</i> , <b>2017</b> , 325, 369-377	14.7	24
154	Development of (Mn <sub>0.77</sub> Fe <sub>0.23</sub> ) <sub>2</sub> O <sub>3</sub> particles as an oxygen carrier for coal combustion with CO <sub>2</sub> capture via in-situ gasification chemical looping combustion (iG-CLC) aided by oxygen uncoupling (CLOU). <i>Fuel Processing Technology</i> , <b>2017</b> , 164, 69-79	7.2	32

153	In situ gasification Chemical-Looping Combustion of coal using limestone as oxygen carrier precursor and sulphur sorbent. <i>Chemical Engineering Journal</i> , <b>2017</b> , 310, 226-239	14.7	38
152	Coal combustion with a spray granulated Cu-Mn mixed oxide for the Chemical Looping with Oxygen Uncoupling (CLOU) process. <i>Applied Energy</i> , <b>2017</b> , 208, 561-570	10.7	16
151	Mercury emissions from coal combustion in fluidized beds under oxy-fuel and air conditions: Influence of coal characteristics and O <sub>2</sub> concentration. <i>Fuel Processing Technology</i> , <b>2017</b> , 167, 695-701	7.2	6
150	Spray granulated Cu-Mn oxygen carrier for chemical looping with oxygen uncoupling (CLOU) process. <i>International Journal of Greenhouse Gas Control</i> , <b>2017</b> , 65, 76-85	4.2	17
149	Combustion and Reforming of Liquid Fossil Fuels through Chemical Looping Processes: Integration of Chemical Looping Processes in a Refinery. <i>Energy Procedia</i> , <b>2017</b> , 114, 325-333	2.3	10
148	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. <i>Energy Procedia</i> , <b>2017</b> , 114, 285-301	2.3	22
147	Chemical Looping Combustion of Biomass: An Approach to BECCS. <i>Energy Procedia</i> , <b>2017</b> , 114, 6021-6029	2.3	14
146	Promising Impregnated Mn-based Oxygen Carriers for Chemical Looping Combustion of Gaseous Fuels. <i>Energy Procedia</i> , <b>2017</b> , 114, 334-343	2.3	10
145	Evaluation of (Mn <sub>x</sub> Fe <sub>1-x</sub> ) <sub>2</sub> Ti <sub>y</sub> O <sub>z</sub> Particles as Oxygen Carrier for Chemical Looping Combustion. <i>Energy Procedia</i> , <b>2017</b> , 114, 302-308	2.3	4
144	Use of Hopcalite-Derived Cu/Mn Mixed Oxide as Oxygen Carrier for Chemical Looping with Oxygen Uncoupling Process. <i>Energy &amp; Fuels</i> , <b>2016</b> , 30, 5953-5963	4.1	19
143	Sulphuric acid production via Chemical Looping Combustion of elemental sulphur. <i>Applied Energy</i> , <b>2016</b> , 178, 736-745	10.7	25
142	Coal combustion in a 50kWth Chemical Looping Combustion unit: Seeking operating conditions to maximize CO <sub>2</sub> capture and combustion efficiency. <i>International Journal of Greenhouse Gas Control</i> , <b>2016</b> , 50, 80-92	4.2	56
141	Tar abatement in a fixed bed catalytic filter candle during biomass gasification in a dual fluidized bed. <i>Applied Catalysis B: Environmental</i> , <b>2016</b> , 188, 198-206	21.8	25
140	Optimization of hydrogen production with CO <sub>2</sub> capture by autothermal chemical-looping reforming using different bioethanol purities. <i>Applied Energy</i> , <b>2016</b> , 169, 491-498	10.7	27
139	Sulphur, nitrogen and mercury emissions from coal combustion with CO <sub>2</sub> capture in chemical looping with oxygen uncoupling (CLOU). <i>International Journal of Greenhouse Gas Control</i> , <b>2016</b> , 46, 28-38	4.2	39
138	The fate of mercury in fluidized beds under oxy-fuel combustion conditions. <i>Fuel</i> , <b>2016</b> , 167, 75-81	7.1	16
137	Bioethanol combustion with CO <sub>2</sub> capture in a 1 kWth Chemical Looping Combustion prototype: Suitability of the oxygen carrier. <i>Chemical Engineering Journal</i> , <b>2016</b> , 283, 1405-1413	14.7	19
136	Tar abatement for clean syngas production during biomass gasification in a dual fluidized bed. <i>Fuel Processing Technology</i> , <b>2016</b> , 152, 116-123	7.2	29

135	Process Comparison for Biomass Combustion: In Situ Gasification-Chemical Looping Combustion (iG-CLC) versus Chemical Looping with Oxygen Uncoupling (CLOU). <i>Energy Technology</i> , <b>2016</b> , 4, 1130-1136	3.5	38
134	On the attrition evaluation of oxygen carriers in Chemical Looping Combustion. <i>Fuel Processing Technology</i> , <b>2016</b> , 148, 188-197	7.2	73
133	Manganese Minerals as Oxygen Carriers for Chemical Looping Combustion of Coal. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2016</b> , 55, 6539-6546	3.9	33
132	Long-lasting Cu-based oxygen carrier material for industrial scale in Chemical Looping Combustion. <i>International Journal of Greenhouse Gas Control</i> , <b>2016</b> , 52, 120-129	4.2	44
131	Design and operation of a 50 kWth Chemical Looping Combustion (CLC) unit for solid fuels. <i>Applied Energy</i> , <b>2015</b> , 157, 295-303	10.7	69
130	Conceptual design of a 100 MWth CLC unit for solid fuel combustion. <i>Applied Energy</i> , <b>2015</b> , 157, 462-474	10.7	44
129	Performance of a low-cost iron ore as an oxygen carrier for Chemical Looping Combustion of gaseous fuels. <i>Chemical Engineering Research and Design</i> , <b>2015</b> , 93, 736-746	5.5	32
128	NO and N <sub>2</sub> O emissions in oxy-fuel combustion of coal in a bubbling fluidized bed combustor. <i>Fuel</i> , <b>2015</b> , 150, 146-153	7.1	44
127	Syngas/H <sub>2</sub> production from bioethanol in a continuous chemical-looping reforming prototype. <i>Fuel Processing Technology</i> , <b>2015</b> , 137, 24-30	7.2	29
126	Morphological analysis of sulfated Ca-based sorbents under conditions corresponding to oxy-fuel fluidized bed combustion. <i>Fuel</i> , <b>2015</b> , 162, 264-270	7.1	7
125	Evaluation of Manganese Minerals for Chemical Looping Combustion. <i>Energy &amp; Fuels</i> , <b>2015</b> , 29, 6605-6615	4.6	48
124	Characterization for disposal of Fe-based oxygen carriers from a CLC unit burning coal. <i>Fuel Processing Technology</i> , <b>2015</b> , 138, 750-757	7.2	16
123	Redox kinetics of CaMg <sub>0.1</sub> Ti <sub>0.125</sub> Mn <sub>0.775</sub> O <sub>2.9</sub> for Chemical Looping Combustion (CLC) and Chemical Looping with Oxygen Uncoupling (CLOU). <i>Chemical Engineering Journal</i> , <b>2015</b> , 269, 67-81	14.7	48
122	The fate of sulphur in the Cu-based Chemical Looping with Oxygen Uncoupling (CLOU) Process. <i>Applied Energy</i> , <b>2014</b> , 113, 1855-1862	10.7	58
121	Performance of a highly reactive impregnated Fe <sub>2</sub> O <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> oxygen carrier with CH <sub>4</sub> and H <sub>2</sub> S in a 500Wth CLC unit. <i>Fuel</i> , <b>2014</b> , 121, 117-125	7.1	85
120	Kinetic determination of a highly reactive impregnated Fe <sub>2</sub> O <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> oxygen carrier for use in gas-fueled Chemical Looping Combustion. <i>Chemical Engineering Journal</i> , <b>2014</b> , 258, 265-280	14.7	77
119	Mercury Release and Speciation in Chemical Looping Combustion of Coal. <i>Energy &amp; Fuels</i> , <b>2014</b> , 28, 2786-2794	4.1	26
118	Energy exploitation of acid gas with high H <sub>2</sub> S content by means of a chemical looping combustion system. <i>Applied Energy</i> , <b>2014</b> , 136, 242-249	10.7	23

117	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). <i>Chemical Engineering Journal</i> , <b>2014</b> , 256, 69-84	14.7	82
116	Performance of Cu- and Fe-based oxygen carriers in a 500 W th CLC unit for sour gas combustion with high H <sub>2</sub> S content. <i>International Journal of Greenhouse Gas Control</i> , <b>2014</b> , 28, 168-179	4.2	46
115	Reduction and Oxidation Kinetics of a CaMn <sub>0.9</sub> Mg <sub>0.1</sub> O <sub>3</sub> Oxygen Carrier for Chemical-Looping Combustion. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2014</b> , 53, 87-103	3.9	62
114	Biomass combustion with CO <sub>2</sub> capture by chemical looping with oxygen uncoupling (CLOU). <i>Fuel Processing Technology</i> , <b>2014</b> , 124, 104-114	7.2	102
113	Sulfur retention in an oxy-fuel bubbling fluidized bed combustor: Effect of coal rank, type of sorbent and O <sub>2</sub> /CO <sub>2</sub> ratio. <i>Fuel</i> , <b>2014</b> , 137, 384-392	7.1	26
112	Effect of Operating Conditions and H <sub>2</sub> S Presence on the Performance of CaMg <sub>0.1</sub> Mn <sub>0.9</sub> O <sub>3</sub> Perovskite Material in Chemical Looping Combustion (CLC). <i>Energy &amp; Fuels</i> , <b>2014</b> , 28, 1262-1274	4.1	45
111	On the use of a highly reactive iron ore in Chemical Looping Combustion of different coals. <i>Fuel</i> , <b>2014</b> , 126, 239-249	7.1	86
110	Release of pollutant components in CLC of lignite. <i>International Journal of Greenhouse Gas Control</i> , <b>2014</b> , 22, 15-24	4.2	54
109	Relevance of the catalytic activity on the performance of a NiO/CaAl <sub>2</sub> O <sub>4</sub> oxygen carrier in a CLC process. <i>Applied Catalysis B: Environmental</i> , <b>2014</b> , 147, 980-987	21.8	29
108	Combustion and Reforming of Ethanol in a Chemical Looping Continuous Unit. <i>Energy Procedia</i> , <b>2014</b> , 63, 53-62	2.3	8
107	Design and Operation of a Coal-fired 50 kWth Chemical Looping Combustor. <i>Energy Procedia</i> , <b>2014</b> , 63, 63-72	2.3	27
106	Assessment of technological solutions for improving chemical looping combustion of solid fuels with CO <sub>2</sub> capture. <i>Chemical Engineering Journal</i> , <b>2013</b> , 233, 56-69	14.7	66
105	Use of chemically and physically mixed iron and nickel oxides as oxygen carriers for gas combustion in a CLC process. <i>Fuel Processing Technology</i> , <b>2013</b> , 115, 152-163	7.2	36
104	Optimum temperature for sulphur retention in fluidised beds working under oxy-fuel combustion conditions. <i>Fuel</i> , <b>2013</b> , 114, 106-113	7.1	49
103	Evaluation of a highly reactive and sulfur resistant synthetic Fe-based oxygen carrier for CLC using gaseous fuels. <i>Energy Procedia</i> , <b>2013</b> , 37, 580-587	2.3	4
102	Performance of a low Ni content oxygen carrier for fuel gas combustion in a continuous CLC unit using a CaO/Al <sub>2</sub> O <sub>3</sub> system as support. <i>International Journal of Greenhouse Gas Control</i> , <b>2013</b> , 14, 209-219	4.2	20
101	Modeling of Limestone Sulfation for Typical Oxy-Fuel Fluidized Bed Combustion Conditions. <i>Energy &amp; Fuels</i> , <b>2013</b> , 27, 2266-2274	4.1	19
100	Fuel reactor model validation: Assessment of the key parameters affecting the chemical-looping combustion of coal. <i>International Journal of Greenhouse Gas Control</i> , <b>2013</b> , 19, 541-551	4.2	50

99	Performance of a bauxite waste as oxygen-carrier for chemical-looping combustion using coal as fuel. <i>Fuel Processing Technology</i> , <b>2013</b> , 109, 57-69	7.2	57
98	Effects of Temperature and Flue Gas Recycle on the SO <sub>2</sub> and NO <sub>x</sub> Emissions in an Oxy-fuel Fluidized Bed Combustor. <i>Energy Procedia</i> , <b>2013</b> , 37, 1275-1282	2.3	23
97	Performance of CLOU process in the combustion of different types of coal with CO <sub>2</sub> capture. <i>International Journal of Greenhouse Gas Control</i> , <b>2013</b> , 12, 430-440	4.2	80
96	Optimization of H <sub>2</sub> production with CO <sub>2</sub> capture by steam reforming of methane integrated with a chemical-looping combustion system. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 11878-11892	6.7	28
95	Use of Chemical-Looping processes for coal combustion with CO <sub>2</sub> capture. <i>Energy Procedia</i> , <b>2013</b> , 37, 540-549	2.3	35
94	Fuel reactor modelling in chemical-looping combustion of coal: 1. model formulation. <i>Chemical Engineering Science</i> , <b>2013</b> , 87, 277-293	4.4	98
93	Evaluation of the use of different coals in Chemical Looping Combustion using a bauxite waste as oxygen carrier. <i>Fuel</i> , <b>2013</b> , 106, 814-826	7.1	60
92	Biomass combustion in a CLC system using an iron ore as an oxygen carrier. <i>International Journal of Greenhouse Gas Control</i> , <b>2013</b> , 19, 322-330	4.2	83
91	Fuel reactor modelling in chemical-looping combustion of coal: 2. Simulation and optimization. <i>Chemical Engineering Science</i> , <b>2013</b> , 87, 173-182	4.4	64
90	Behaviour of a bauxite waste material as oxygen carrier in a 500Wth CLC unit with coal. <i>International Journal of Greenhouse Gas Control</i> , <b>2013</b> , 17, 170-182	4.2	54
89	Pollutant emissions in a bubbling fluidized bed combustor working in oxy-fuel operating conditions: Effect of flue gas recirculation. <i>Applied Energy</i> , <b>2013</b> , 102, 860-867	10.7	54
88	Investigation of Combined Supports for Cu-Based Oxygen Carriers for Chemical-Looping with Oxygen Uncoupling (CLOU). <i>Energy &amp; Fuels</i> , <b>2013</b> , 27, 3918-3927	4.1	54
87	Progress in Chemical-Looping Combustion and Reforming technologies. <i>Progress in Energy and Combustion Science</i> , <b>2012</b> , 38, 215-282	33.6	1554
86	Catalytic Activity of Ni-Based Oxygen-Carriers for Steam Methane Reforming in Chemical-Looping Processes. <i>Energy &amp; Fuels</i> , <b>2012</b> , 26, 791-800	4.1	76
85	Low-Cost Fe-Based Oxygen Carrier Materials for the iG-CLC Process with Coal. 1. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2012</b> , 51, 16216-16229	3.9	66
84	Use of an Fe-Based Residue from Alumina Production as an Oxygen Carrier in Chemical-Looping Combustion. <i>Energy &amp; Fuels</i> , <b>2012</b> , 26, 1420-1431	4.1	67
83	Low-Cost Fe-Based Oxygen Carrier Materials for the iG-CLC Process with Coal. 2. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2012</b> , 51, 16230-16241	3.9	31
82	Evaluation of a Spray-Dried CuO/MgAl <sub>2</sub> O <sub>4</sub> Oxygen Carrier for the Chemical Looping with Oxygen Uncoupling Process. <i>Energy &amp; Fuels</i> , <b>2012</b> , 26, 3069-3081	4.1	98

81	Effect of operating conditions in Chemical-Looping Combustion of coal in a 500Wth unit. <i>International Journal of Greenhouse Gas Control</i> , <b>2012</b> , 6, 153-163	4.2	78
80	Demonstration of chemical-looping with oxygen uncoupling (CLOU) process in a 1.5kWth continuously operating unit using a Cu-based oxygen-carrier. <i>International Journal of Greenhouse Gas Control</i> , <b>2012</b> , 6, 189-200	4.2	206
79	Effect of H <sub>2</sub> S on the behaviour of an impregnated NiO-based oxygen-carrier for chemical-looping combustion (CLC). <i>Applied Catalysis B: Environmental</i> , <b>2012</b> , 126, 186-199	21.8	41
78	Identification of operational regions in the Chemical-Looping with Oxygen Uncoupling (CLOU) process with a Cu-based oxygen carrier. <i>Fuel</i> , <b>2012</b> , 102, 634-645	7.1	69
77	Reduction and oxidation kinetics of nickel-based oxygen-carriers for chemical-looping combustion and chemical-looping reforming. <i>Chemical Engineering Journal</i> , <b>2012</b> , 188, 142-154	14.7	142
76	Relevance of the coal rank on the performance of the in situ gasification chemical-looping combustion. <i>Chemical Engineering Journal</i> , <b>2012</b> , 195-196, 91-102	14.7	86
75	Development of Cu-based oxygen carriers for Chemical-Looping with Oxygen Uncoupling (CLOU) process. <i>Fuel</i> , <b>2012</b> , 96, 226-238	7.1	168
74	Prompt considerations on the design of Chemical-Looping Combustion of coal from experimental tests. <i>Fuel</i> , <b>2012</b> , 97, 219-232	7.1	64
73	Theoretical approach on the CLC performance with solid fuels: Optimizing the solids inventory. <i>Fuel</i> , <b>2012</b> , 97, 536-551	7.1	57
72	Behavior of ilmenite as oxygen carrier in chemical-looping combustion. <i>Fuel Processing Technology</i> , <b>2012</b> , 94, 101-112	7.2	179
71	Testing of a highly reactive impregnated Fe <sub>2</sub> O <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> oxygen carrier for a SRCLC system in a continuous CLC unit. <i>Fuel Processing Technology</i> , <b>2012</b> , 96, 37-47	7.2	59
70	Effect of Fe-blivine on the tar content during biomass gasification in a dual fluidized bed. <i>Applied Catalysis B: Environmental</i> , <b>2012</b> , 121-122, 214-222	21.8	131
69	High temperature behaviour of a CuO/Al <sub>2</sub> O <sub>3</sub> oxygen carrier for chemical-looping combustion. <i>International Journal of Greenhouse Gas Control</i> , <b>2011</b> , 5, 659-667	4.2	85
68	Characterization of a limestone in a batch fluidized bed reactor for sulfur retention under oxy-fuel operating conditions. <i>International Journal of Greenhouse Gas Control</i> , <b>2011</b> , 5, 1190-1198	4.2	41
67	The use of ilmenite as oxygen-carrier in a 500 Wth Chemical-Looping Coal Combustion unit. <i>International Journal of Greenhouse Gas Control</i> , <b>2011</b> , 5, 1630-1642	4.2	159
66	Effect of Support on the Behavior of Cu-Based Oxygen Carriers during Long-Term CLC Operation at Temperatures above 1073 K. <i>Energy &amp; Fuels</i> , <b>2011</b> , 25, 1316-1326	4.1	84
65	Optimization of hydrogen production by Chemical-Looping auto-thermal Reforming working with Ni-based oxygen-carriers. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 9663-9672	6.7	86
64	Hydrogen production with CO <sub>2</sub> 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. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 4370-4381	8.9	87



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60	Optimization of a chemical-looping auto-thermal reforming system working with a Ni-based oxygen-carrier. <i>Energy Procedia</i> , <b>2011</b> , 4, 425-432	2.3	3
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58	Ilmenite Activation during Consecutive Redox Cycles in Chemical-Looping Combustion. <i>Energy &amp; Fuels</i> , <b>2010</b> , 24, 1402-1413	4.1	235
57	Effect of gas composition in Chemical-Looping Combustion with copper-based oxygen carriers: Fate of light hydrocarbons. <i>International Journal of Greenhouse Gas Control</i> , <b>2010</b> , 4, 13-22	4.2	40
56	Effect of gas composition in Chemical-Looping Combustion with copper-based oxygen carriers: Fate of sulphur. <i>International Journal of Greenhouse Gas Control</i> , <b>2010</b> , 4, 762-770	4.2	81
55	Reactivity of a NiO/Al <sub>2</sub> O <sub>3</sub> oxygen carrier prepared by impregnation for chemical-looping combustion. <i>Fuel</i> , <b>2010</b> , 89, 3399-3409	7.1	73
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48	Synthesis gas generation by chemical-looping reforming using a Ni-based oxygen carrier. <i>Energy Procedia</i> , <b>2009</b> , 1, 3-10	2.3	41
47	Effect of gas impurities on the behavior of Ni-based oxygen carriers on chemical-looping combustion. <i>Energy Procedia</i> , <b>2009</b> , 1, 11-18	2.3	18
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41	Effect of support on reactivity and selectivity of Ni-based oxygen carriers for chemical-looping combustion. <i>Fuel</i> , <b>2008</b> , 87, 2641-2650	7.1	140
40	Reduction Kinetics of Cu-, Ni-, and Fe-Based Oxygen Carriers Using Syngas (CO + H <sub>2</sub> ) for Chemical-Looping Combustion. <i>Energy &amp; Fuels</i> , <b>2007</b> , 21, 1843-1853	4.1	201
39	Solid waste management of a chemical-looping combustion plant using Cu-based oxygen carriers. <i>Environmental Science &amp; Technology</i> , <b>2007</b> , 41, 5882-7	10.3	32
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37	Mapping of the range of operational conditions for Cu-, Fe-, and Ni-based oxygen carriers in chemical-looping combustion. <i>Chemical Engineering Science</i> , <b>2007</b> , 62, 533-549	4.4	478
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24	Simultaneous Calcination and Sulfidation of Calcium-Based Sorbents. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2004</b> , 43, 3261-3269	3.9	24
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