

Juan Adanez

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237
papers

14,353
citations

63
h-index

111
g-index

242
ext. papers

15,922
ext. citations

6.7
avg, IF

6.59
L-index

| # | Paper | IF | Citations |
|-----|--|------|-----------|
| 237 | Progress in Chemical-Looping Combustion and Reforming technologies. <i>Progress in Energy and Combustion Science</i> , 2012 , 38, 215-282 | 33.6 | 1554 |
| 236 | Selection of Oxygen Carriers for Chemical-Looping Combustion. <i>Energy & Fuels</i> , 2004 , 18, 371-377 | 4.1 | 566 |
| 235 | Mapping of the range of operational conditions for Cu-, Fe-, and Ni-based oxygen carriers in chemical-looping combustion. <i>Chemical Engineering Science</i> , 2007 , 62, 533-549 | 4.4 | 478 |
| 234 | Development of Cu-based oxygen carriers for chemical-looping combustion. <i>Fuel</i> , 2004 , 83, 1749-1757 | 7.1 | 307 |
| 233 | Chemical looping combustion of solid fuels. <i>Progress in Energy and Combustion Science</i> , 2018 , 65, 6-66 | 33.6 | 305 |
| 232 | Chemical Looping Combustion in a 10 kWth Prototype Using a CuO/Al ₂ O ₃ Oxygen Carrier: Effect of Operating Conditions on Methane Combustion. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 6075-6080 | 3.9 | 242 |
| 231 | Operation of a 10 kWth chemical-looping combustor during 200 h with a CuO/Al ₂ O ₃ oxygen carrier. <i>Fuel</i> , 2007 , 86, 1036-1045 | 7.1 | 239 |
| 230 | Ilmenite Activation during Consecutive Redox Cycles in Chemical-Looping Combustion. <i>Energy & Fuels</i> , 2010 , 24, 1402-1413 | 4.1 | 235 |
| 229 | Kinetics of redox reactions of ilmenite for chemical-looping combustion. <i>Chemical Engineering Science</i> , 2011 , 66, 689-702 | 4.4 | 220 |
| 228 | Calcination of calcium-based sorbents at pressure in a broad range of CO ₂ concentrations. <i>Chemical Engineering Science</i> , 2002 , 57, 2381-2393 | 4.4 | 211 |
| 227 | 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> , 2012 , 6, 189-200 | 4.2 | 206 |
| 226 | Reduction Kinetics of Cu-, Ni-, and Fe-Based Oxygen Carriers Using Syngas (CO + H ₂) for Chemical-Looping Combustion. <i>Energy & Fuels</i> , 2007 , 21, 1843-1853 | 4.1 | 201 |
| 225 | Reduction and Oxidation Kinetics of a Copper-Based Oxygen Carrier Prepared by Impregnation for Chemical-Looping Combustion. <i>Industrial & Engineering Chemistry Research</i> , 2004 , 43, 8168-8177 | 3.9 | 197 |
| 224 | Effect of Pressure on the Behavior of Copper-, Iron-, and Nickel-Based Oxygen Carriers for Chemical-Looping Combustion. <i>Energy & Fuels</i> , 2006 , 20, 26-33 | 4.1 | 195 |
| 223 | Impregnated CuO/Al ₂ O ₃ Oxygen Carriers for Chemical-Looping Combustion: Avoiding Fluidized Bed Agglomeration. <i>Energy & Fuels</i> , 2005 , 19, 1850-1856 | 4.1 | 192 |
| 222 | Behavior of ilmenite as oxygen carrier in chemical-looping combustion. <i>Fuel Processing Technology</i> , 2012 , 94, 101-112 | 7.2 | 179 |
| 221 | Development of Cu-based oxygen carriers for Chemical-Looping with Oxygen Uncoupling (CLOU) process. <i>Fuel</i> , 2012 , 96, 226-238 | 7.1 | 168 |

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| 220 | The use of ilmenite as oxygen-carrier in a 500 Wth Chemical-Looping Coal Combustion unit. <i>International Journal of Greenhouse Gas Control</i> , 2011 , 5, 1630-1642 | 4.2 | 159 |
| 219 | Hydrogen production by chemical-looping reforming in a circulating fluidized bed reactor using Ni-based oxygen carriers. <i>Journal of Power Sources</i> , 2009 , 192, 27-34 | 8.9 | 156 |
| 218 | Reduction and oxidation kinetics of nickel-based oxygen-carriers for chemical-looping combustion and chemical-looping reforming. <i>Chemical Engineering Journal</i> , 2012 , 188, 142-154 | 14.7 | 142 |
| 217 | Effect of support on reactivity and selectivity of Ni-based oxygen carriers for chemical-looping combustion. <i>Fuel</i> , 2008 , 87, 2641-2650 | 7.1 | 140 |
| 216 | Effect of Fe ₂ O ₃ on the tar content during biomass gasification in a dual fluidized bed. <i>Applied Catalysis B: Environmental</i> , 2012 , 121-122, 214-222 | 21.8 | 131 |
| 215 | Temperature variations in the oxygen carrier particles during their reduction and oxidation in a chemical-looping combustion system. <i>Chemical Engineering Science</i> , 2005 , 60, 851-862 | 4.4 | 130 |
| 214 | Chemical-looping combustion using syngas as fuel. <i>International Journal of Greenhouse Gas Control</i> , 2007 , 1, 158-169 | 4.2 | 127 |
| 213 | Synthesis gas generation by chemical-looping reforming in a batch fluidized bed reactor using Ni-based oxygen carriers. <i>Chemical Engineering Journal</i> , 2008 , 144, 289-298 | 14.7 | 127 |
| 212 | Methane Combustion in a 500 Wth Chemical-Looping Combustion System Using an Impregnated Ni-Based Oxygen Carrier. <i>Energy & Fuels</i> , 2009 , 23, 130-142 | 4.1 | 121 |
| 211 | Modeling of the chemical-looping combustion of methane using a Cu-based oxygen-carrier. <i>Combustion and Flame</i> , 2010 , 157, 602-615 | 5.3 | 106 |
| 210 | Syngas combustion in a 500 Wth Chemical-Looping Combustion system using an impregnated Cu-based oxygen carrier. <i>Fuel Processing Technology</i> , 2009 , 90, 1471-1479 | 7.2 | 105 |
| 209 | Hydrogen production by auto-thermal chemical-looping reforming in a pressurized fluidized bed reactor using Ni-based oxygen carriers. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 151-160 | 6.7 | 104 |
| 208 | Biomass combustion with CO ₂ capture by chemical looping with oxygen uncoupling (CLOU). <i>Fuel Processing Technology</i> , 2014 , 124, 104-114 | 7.2 | 102 |
| 207 | NiO/Al ₂ O ₃ oxygen carriers for chemical-looping combustion prepared by impregnation and deposition-precipitation methods. <i>Fuel</i> , 2009 , 88, 1016-1023 | 7.1 | 99 |
| 206 | Fuel reactor modelling in chemical-looping combustion of coal: 1. model formulation. <i>Chemical Engineering Science</i> , 2013 , 87, 277-293 | 4.4 | 98 |
| 205 | Evaluation of a Spray-Dried CuO/MgAl ₂ O ₄ Oxygen Carrier for the Chemical Looping with Oxygen Uncoupling Process. <i>Energy & Fuels</i> , 2012 , 26, 3069-3081 | 4.1 | 98 |
| 204 | Nickel-Copper Oxygen Carriers To Reach Zero CO and H ₂ Emissions in Chemical-Looping Combustion. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 2617-2625 | 3.9 | 97 |
| 203 | Negative CO ₂ emissions through the use of biofuels in chemical looping technology: A review. <i>Applied Energy</i> , 2018 , 232, 657-684 | 10.7 | 93 |

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| 202 | Hydrogen production with CO ₂ 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> , 2011 , 196, 4370-4381 | 8.9 | 87 |
| 201 | Effect of Fuel Gas Composition in Chemical-Looping Combustion with Ni-Based Oxygen Carriers. 1. Fate of Sulfur. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 2499-2508 | 3.9 | 87 |
| 200 | On the use of a highly reactive iron ore in Chemical Looping Combustion of different coals. <i>Fuel</i> , 2014 , 126, 239-249 | 7.1 | 86 |
| 199 | Relevance of the coal rank on the performance of the in situ gasification chemical-looping combustion. <i>Chemical Engineering Journal</i> , 2012 , 195-196, 91-102 | 14.7 | 86 |
| 198 | Optimization of hydrogen production by Chemical-Looping auto-thermal Reforming working with Ni-based oxygen-carriers. <i>International Journal of Hydrogen Energy</i> , 2011 , 36, 9663-9672 | 6.7 | 86 |
| 197 | Performance of a highly reactive impregnated Fe ₂ O ₃ /Al ₂ O ₃ oxygen carrier with CH ₄ and H ₂ S in a 500Wth CLC unit. <i>Fuel</i> , 2014 , 121, 117-125 | 7.1 | 85 |
| 196 | High temperature behaviour of a CuO/Al ₂ O ₃ oxygen carrier for chemical-looping combustion. <i>International Journal of Greenhouse Gas Control</i> , 2011 , 5, 659-667 | 4.2 | 85 |
| 195 | Biomass combustion in a CLC system using an iron ore as an oxygen carrier. <i>International Journal of Greenhouse Gas Control</i> , 2013 , 19, 322-330 | 4.2 | 83 |
| 194 | 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> , 2014 , 256, 69-84 | 14.7 | 82 |
| 193 | Effect of gas composition in Chemical-Looping Combustion with copper-based oxygen carriers: Fate of sulphur. <i>International Journal of Greenhouse Gas Control</i> , 2010 , 4, 762-770 | 4.2 | 81 |
| 192 | The Performance in a Fixed Bed Reactor of Copper-Based Oxides on Titania as Oxygen Carriers for Chemical Looping Combustion of Methane. <i>Energy & Fuels</i> , 2005 , 19, 433-441 | 4.1 | 81 |
| 191 | Performance of CLOU process in the combustion of different types of coal with CO ₂ capture. <i>International Journal of Greenhouse Gas Control</i> , 2013 , 12, 430-440 | 4.2 | 80 |
| 190 | Syngas combustion in a chemical-looping combustion system using an impregnated Ni-based oxygen carrier. <i>Fuel</i> , 2009 , 88, 2357-2364 | 7.1 | 79 |
| 189 | Effect of operating conditions in Chemical-Looping Combustion of coal in a 500Wth unit. <i>International Journal of Greenhouse Gas Control</i> , 2012 , 6, 153-163 | 4.2 | 78 |
| 188 | Kinetic determination of a highly reactive impregnated Fe ₂ O ₃ /Al ₂ O ₃ oxygen carrier for use in gas-fueled Chemical Looping Combustion. <i>Chemical Engineering Journal</i> , 2014 , 258, 265-280 | 14.7 | 77 |
| 187 | Chemical-looping combustion: Status and research needs. <i>Proceedings of the Combustion Institute</i> , 2019 , 37, 4303-4317 | 5.9 | 77 |
| 186 | Catalytic Activity of Ni-Based Oxygen-Carriers for Steam Methane Reforming in Chemical-Looping Processes. <i>Energy & Fuels</i> , 2012 , 26, 791-800 | 4.1 | 76 |
| 185 | Reactivity of a NiO/Al ₂ O ₃ oxygen carrier prepared by impregnation for chemical-looping combustion. <i>Fuel</i> , 2010 , 89, 3399-3409 | 7.1 | 73 |

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| 184 | On the attrition evaluation of oxygen carriers in Chemical Looping Combustion. <i>Fuel Processing Technology</i> , 2016 , 148, 188-197 | 7.2 | 73 |
| 183 | Circulating fluidised bed co-combustion of coal and biomass. <i>Fuel</i> , 2004 , 83, 277-286 | 7.1 | 71 |
| 182 | Design and operation of a 50 kWth Chemical Looping Combustion (CLC) unit for solid fuels. <i>Applied Energy</i> , 2015 , 157, 295-303 | 10.7 | 69 |
| 181 | Identification of operational regions in the Chemical-Looping with Oxygen Uncoupling (CLOU) process with a Cu-based oxygen carrier. <i>Fuel</i> , 2012 , 102, 634-645 | 7.1 | 69 |
| 180 | Development of CuO-based oxygen-carrier materials suitable for Chemical-Looping with Oxygen Uncoupling (CLOU) process. <i>Energy Procedia</i> , 2011 , 4, 417-424 | 2.3 | 69 |
| 179 | Use of an Fe-Based Residue from Alumina Production as an Oxygen Carrier in Chemical-Looping Combustion. <i>Energy & Fuels</i> , 2012 , 26, 1420-1431 | 4.1 | 67 |
| 178 | Assessment of technological solutions for improving chemical looping combustion of solid fuels with CO ₂ capture. <i>Chemical Engineering Journal</i> , 2013 , 233, 56-69 | 14.7 | 66 |
| 177 | Low-Cost Fe-Based Oxygen Carrier Materials for the iG-CLC Process with Coal. 1. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 16216-16229 | 3.9 | 66 |
| 176 | Prompt considerations on the design of Chemical-Looping Combustion of coal from experimental tests. <i>Fuel</i> , 2012 , 97, 219-232 | 7.1 | 64 |
| 175 | Fuel reactor modelling in chemical-looping combustion of coal: 2D simulation and optimization. <i>Chemical Engineering Science</i> , 2013 , 87, 173-182 | 4.4 | 64 |
| 174 | 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. <i>Energy & Fuels</i> , 2006 , 20, 148-154 | 4.1 | 63 |
| 173 | Reduction and Oxidation Kinetics of a CaMn _{0.9} Mg _{0.1} O ₃ Oxygen Carrier for Chemical-Looping Combustion. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 87-103 | 3.9 | 62 |
| 172 | Calcium-based sorbents behaviour during sulphation at oxy-fuel fluidised bed combustion conditions. <i>Fuel</i> , 2011 , 90, 3100-3108 | 7.1 | 61 |
| 171 | Evaluation of the use of different coals in Chemical Looping Combustion using a bauxite waste as oxygen carrier. <i>Fuel</i> , 2013 , 106, 814-826 | 7.1 | 60 |
| 170 | Testing of a highly reactive impregnated Fe ₂ O ₃ /Al ₂ O ₃ oxygen carrier for a SRCLC system in a continuous CLC unit. <i>Fuel Processing Technology</i> , 2012 , 96, 37-47 | 7.2 | 59 |
| 169 | The fate of sulphur in the Cu-based Chemical Looping with Oxygen Uncoupling (CLOU) Process. <i>Applied Energy</i> , 2014 , 113, 1855-1862 | 10.7 | 58 |
| 168 | Performance of a bauxite waste as oxygen-carrier for chemical-looping combustion using coal as fuel. <i>Fuel Processing Technology</i> , 2013 , 109, 57-69 | 7.2 | 57 |
| 167 | Theoretical approach on the CLC performance with solid fuels: Optimizing the solids inventory. <i>Fuel</i> , 2012 , 97, 536-551 | 7.1 | 57 |

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| 166 | Circulating fluidized bed combustion in the turbulent regime: modelling of carbon combustion efficiency and sulphur retention. <i>Fuel</i> , 2001 , 80, 1405-1414 | 7.1 | 57 |
| 165 | Coal combustion in a 50kWth Chemical Looping Combustion unit: Seeking operating conditions to maximize CO ₂ capture and combustion efficiency. <i>International Journal of Greenhouse Gas Control</i> , 2016 , 50, 80-92 | 4.2 | 56 |
| 164 | Influence of Limestone Addition in a 10 kWth Chemical-Looping Combustion Unit Operated with Petcoke. <i>Energy & Fuels</i> , 2011 , 25, 4818-4828 | 4.1 | 55 |
| 163 | Release of pollutant components in CLC of lignite. <i>International Journal of Greenhouse Gas Control</i> , 2014 , 22, 15-24 | 4.2 | 54 |
| 162 | Behaviour of a bauxite waste material as oxygen carrier in a 500Wth CLC unit with coal. <i>International Journal of Greenhouse Gas Control</i> , 2013 , 17, 170-182 | 4.2 | 54 |
| 161 | Pollutant emissions in a bubbling fluidized bed combustor working in oxy-fuel operating conditions: Effect of flue gas recirculation. <i>Applied Energy</i> , 2013 , 102, 860-867 | 10.7 | 54 |
| 160 | Determination of Biomass Char Combustion Reactivities for FBC Applications by a Combined Method. <i>Industrial & Engineering Chemistry Research</i> , 2001 , 40, 4317-4323 | 3.9 | 54 |
| 159 | Axial voidage profiles in fast fluidized beds. <i>Powder Technology</i> , 1994 , 81, 259-268 | 5.2 | 54 |
| 158 | Chemical looping combustion of biomass: CLOU experiments with a Cu-Mn mixed oxide. <i>Fuel Processing Technology</i> , 2018 , 172, 179-186 | 7.2 | 51 |
| 157 | Chemical Looping Combustion of different types of biomass in a 0.5 kWth unit. <i>Fuel</i> , 2018 , 211, 868-875 | 7.1 | 51 |
| 156 | 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. <i>Environmental Science & Technology</i> , 2005 , 39, 5796-803 | 10.3 | 51 |
| 155 | The grace project Development of oxygen carrier particles for chemical-looping combustion. Design and operation of a 10 kW chemical-looping combustor 2005 , 115-123 | | 51 |
| 154 | Fuel reactor model validation: Assessment of the key parameters affecting the chemical-looping combustion of coal. <i>International Journal of Greenhouse Gas Control</i> , 2013 , 19, 541-551 | 4.2 | 50 |
| 153 | Transport velocities of coal and sand particles. <i>Powder Technology</i> , 1993 , 77, 61-68 | 5.2 | 50 |
| 152 | Optimum temperature for sulphur retention in fluidised beds working under oxy-fuel combustion conditions. <i>Fuel</i> , 2013 , 114, 106-113 | 7.1 | 49 |
| 151 | Evaluation of Manganese Minerals for Chemical Looping Combustion. <i>Energy & Fuels</i> , 2015 , 29, 6605-6615 | 4.6 | 48 |
| 150 | Redox kinetics of CaMg _{0.1} Ti _{0.125} Mn _{0.775} O _{2.9} for Chemical Looping Combustion (CLC) and Chemical Looping with Oxygen Uncoupling (CLOU). <i>Chemical Engineering Journal</i> , 2015 , 269, 67-81 | 14.7 | 48 |
| 149 | Calcination of calcium acetate and calcium magnesium acetate: effect of the reacting atmosphere. <i>Fuel</i> , 1999 , 78, 583-592 | 7.1 | 48 |

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| 148 | 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. <i>International Journal of Greenhouse Gas Control</i> , 2014 , 28, 168-179 | 4.2 | 46 |
| 147 | Study of modified calcium hydroxides for enhancing SO ₂ removal during sorbent injection in pulverized coal boilers. <i>Fuel</i> , 1997 , 76, 257-265 | 7.1 | 46 |
| 146 | Effect of Operating Conditions and H ₂ S Presence on the Performance of CaMg _{0.1} Mn _{0.9} O ₃ Perovskite Material in Chemical Looping Combustion (CLC). <i>Energy & Fuels</i> , 2014 , 28, 1262-1274 | 4.1 | 45 |
| 145 | Conceptual design of a 100 MWth CLC unit for solid fuel combustion. <i>Applied Energy</i> , 2015 , 157, 462-474 | 10.7 | 44 |
| 144 | NO and N ₂ O emissions in oxy-fuel combustion of coal in a bubbling fluidized bed combustor. <i>Fuel</i> , 2015 , 150, 146-153 | 7.1 | 44 |
| 143 | Chemical Looping Combustion of gaseous and solid fuels with manganese-iron mixed oxide as oxygen carrier. <i>Energy Conversion and Management</i> , 2018 , 159, 221-231 | 10.6 | 44 |
| 142 | Modeling of the Devolatilization of Nonspherical Wet Pine Wood Particles in Fluidized Beds. <i>Industrial & Engineering Chemistry Research</i> , 2002 , 41, 3642-3650 | 3.9 | 44 |
| 141 | Long-lasting Cu-based oxygen carrier material for industrial scale in Chemical Looping Combustion. <i>International Journal of Greenhouse Gas Control</i> , 2016 , 52, 120-129 | 4.2 | 44 |
| 140 | Radial gas mixing in a fast fluidized bed. <i>Powder Technology</i> , 1997 , 94, 163-171 | 5.2 | 43 |
| 139 | Characterization of a sol-gel derived CuO/CuAl ₂ O ₄ oxygen carrier for chemical looping combustion (CLC) of gaseous fuels: Relevance of gas-solid and oxygen uncoupling reactions. <i>Fuel Processing Technology</i> , 2015 , 133, 210-219 | 7.2 | 42 |
| 138 | Kinetics of a lignite-char gasification by CO ₂ . <i>Fuel</i> , 1985 , 64, 801-804 | 7.1 | 42 |
| 137 | Innovative Oxygen Carriers Uplifting Chemical-looping Combustion. <i>Energy Procedia</i> , 2014 , 63, 113-130 | 2.3 | 41 |
| 136 | Effect of H ₂ S on the behaviour of an impregnated NiO-based oxygen-carrier for chemical-looping combustion (CLC). <i>Applied Catalysis B: Environmental</i> , 2012 , 126, 186-199 | 21.8 | 41 |
| 135 | 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> , 2011 , 5, 1190-1198 | 4.2 | 41 |
| 134 | Synthesis gas generation by chemical-looping reforming using a Ni-based oxygen carrier. <i>Energy Procedia</i> , 2009 , 1, 3-10 | 2.3 | 41 |
| 133 | Effect of Fuel Gas Composition in Chemical-Looping Combustion with Ni-Based Oxygen Carriers. 2. Fate of Light Hydrocarbons. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 2509-2518 | 3.9 | 41 |
| 132 | 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> , 2010 , 4, 13-22 | 4.2 | 40 |
| 131 | Titanium substituted manganese-ferrite as an oxygen carrier with permanent magnetic properties for chemical looping combustion of solid fuels. <i>Fuel</i> , 2017 , 195, 38-48 | 7.1 | 39 |

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| 130 | Sulphur, nitrogen and mercury emissions from coal combustion with CO ₂ capture in chemical looping with oxygen uncoupling (CLOU). <i>International Journal of Greenhouse Gas Control</i> , 2016 , 46, 28-38 ^{4.2} | 39 |
| 129 | In situ gasification Chemical-Looping Combustion of coal using limestone as oxygen carrier precursor and sulphur sorbent. <i>Chemical Engineering Journal</i> , 2017 , 310, 226-239 | 14.7 38 |
| 128 | Process Comparison for Biomass Combustion: In Situ Gasification-Chemical Looping Combustion (iG-CLC) versus Chemical Looping with Oxygen Uncoupling (CLOU). <i>Energy Technology</i> , 2016 , 4, 1130-1138 ^{3.5} | 38 |
| 127 | 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> , 2013 , 115, 152-163 | 7.2 36 |
| 126 | Performance in a Fixed-Bed Reactor of Titania-Supported Nickel Oxide as Oxygen Carriers for the Chemical-Looping Combustion of Methane in Multicycle Tests. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 157-165 | 3.9 36 |
| 125 | Use of Chemical-Looping processes for coal combustion with CO ₂ capture. <i>Energy Procedia</i> , 2013 , 37, 540-549 | 2.3 35 |
| 124 | Ilmenite as oxygen carrier in a chemical looping combustion system with coal. <i>Energy Procedia</i> , 2011 , 4, 362-369 | 2.3 35 |
| 123 | On a Highly Reactive Fe ₂ O ₃ /Al ₂ O ₃ Oxygen Carrier for in Situ Gasification Chemical Looping Combustion. <i>Energy & Fuels</i> , 2014 , 28, 7043-7052 | 4.1 33 |
| 122 | Manganese Minerals as Oxygen Carriers for Chemical Looping Combustion of Coal. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 6539-6546 | 3.9 33 |
| 121 | Biomass chemical looping gasification for syngas production using ilmenite as oxygen carrier in a 1.5 kWth unit. <i>Chemical Engineering Journal</i> , 2021 , 405, 126679 | 14.7 33 |
| 120 | Development of (Mn _{0.77} Fe _{0.23}) ₂ O ₃ particles as an oxygen carrier for coal combustion with CO ₂ capture via in-situ gasification chemical looping combustion (iG-CLC) aided by oxygen uncoupling (CLOU). <i>Fuel Processing Technology</i> , 2017 , 164, 69-79 | 7.2 32 |
| 119 | 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> , 2015 , 93, 736-746 | 5.5 32 |
| 118 | Solid waste management of a chemical-looping combustion plant using Cu-based oxygen carriers. <i>Environmental Science & Technology</i> , 2007 , 41, 5882-7 | 10.3 32 |
| 117 | Low-Cost Fe-Based Oxygen Carrier Materials for the iG-CLC Process with Coal. 2. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 16230-16241 | 3.9 31 |
| 116 | Biomass Chemical Looping Gasification of pine wood using a synthetic FeO/AlO oxygen carrier in a continuous unit. <i>Bioresource Technology</i> , 2020 , 316, 123908 | 11 31 |
| 115 | Modelling for the high-temperature sulphation of calcium-based sorbents with cylindrical and plate-like pore geometries. <i>Chemical Engineering Science</i> , 2000 , 55, 3665-3683 | 4.4 30 |
| 114 | Comparison of Mechanistic Models for the Sulfation Reaction in a Broad Range of Particle Sizes of Sorbents. <i>Industrial & Engineering Chemistry Research</i> , 1996 , 35, 2190-2197 | 3.9 30 |
| 113 | Syngas/H ₂ production from bioethanol in a continuous chemical-looping reforming prototype. <i>Fuel Processing Technology</i> , 2015 , 137, 24-30 | 7.2 29 |

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| 112 | Relevance of the catalytic activity on the performance of a NiO/CaAl ₂ O ₄ oxygen carrier in a CLC process. <i>Applied Catalysis B: Environmental</i> , 2014 , 147, 980-987 | 21.8 | 29 |
| 111 | Combustion of Wood Chips in a CFBC. Modeling and Validation. <i>Industrial & Engineering Chemistry Research</i> , 2003 , 42, 987-999 | 3.9 | 29 |
| 110 | Methods for characterization of sorbents used in fluidized bed boilers?. <i>Fuel</i> , 1994 , 73, 355-362 | 7.1 | 29 |
| 109 | Tar abatement for clean syngas production during biomass gasification in a dual fluidized bed. <i>Fuel Processing Technology</i> , 2016 , 152, 116-123 | 7.2 | 29 |
| 108 | Optimization of H ₂ production with CO ₂ capture by steam reforming of methane integrated with a chemical-looping combustion system. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 11878-11892 | 6.7 | 28 |
| 107 | Mn-based oxygen carriers prepared by impregnation for Chemical Looping Combustion with diverse fuels. <i>Fuel Processing Technology</i> , 2018 , 178, 236-250 | 7.2 | 28 |
| 106 | Optimization of hydrogen production with CO ₂ capture by autothermal chemical-looping reforming using different bioethanol purities. <i>Applied Energy</i> , 2016 , 169, 491-498 | 10.7 | 27 |
| 105 | Design and Operation of a Coal-fired 50 kWth Chemical Looping Combustor. <i>Energy Procedia</i> , 2014 , 63, 63-72 | 2.3 | 27 |
| 104 | Chemical-looping Combustion CO ₂ Ready Gas Power. <i>Energy Procedia</i> , 2009 , 1, 1557-1564 | 2.3 | 27 |
| 103 | Effect of pore geometry on the sintering of Ca-based sorbents during calcination at high temperatures. <i>Fuel</i> , 2004 , 83, 1733-1742 | 7.1 | 27 |
| 102 | Minimum fluidization velocities of fluidized-bed coal-combustion solids. <i>Powder Technology</i> , 1991 , 67, 113-119 | 5.2 | 27 |
| 101 | Chemical Looping Combustion of liquid fossil fuels in a 1 kW th unit using a Fe-based oxygen carrier. <i>Fuel Processing Technology</i> , 2017 , 160, 47-54 | 7.2 | 26 |
| 100 | Mercury Release and Speciation in Chemical Looping Combustion of Coal. <i>Energy & Fuels</i> , 2014 , 28, 2786-2794 | 4.1 | 26 |
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