

J Carlos Abanades

List of Publications by Year in descending order

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161
papers

12,878
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25014

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#	ARTICLE	IF	CITATIONS
1	Integrated Calcium Looping System with Circulating Fluidized Bed Reactors for Low CO ₂ Emission Cement Plants. <i>International Journal of Greenhouse Gas Control</i> , 2022, 114, 103555.	2.3	12
2	Carbonation Kinetics of Ca(OH) ₂ Under Conditions of Entrained Reactors to Capture CO ₂ . <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 3272-3277.	1.8	8
3	Experimental Investigation of Sulfation Phenomena in Calcium Looping Systems Integrated in Cement Plants. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 4561-4566.	1.8	0
4	Investigation of the dynamic evolution of the CO ₂ carrying capacity of solids with time in La Pereda 1.7 MWth calcium looping pilot plant. <i>International Journal of Greenhouse Gas Control</i> , 2020, 92, 102856.	2.3	9
5	Advanced Packed-Bed Ca-Cu Looping Process for the CO ₂ Capture From Steel Mill Off-Gases. <i>Frontiers in Energy Research</i> , 2020, 8, .	1.2	10
6	Thermal Integration of a Flexible Calcium Looping CO ₂ Capture System in an Existing Back-Up Coal Power Plant. <i>ACS Omega</i> , 2020, 5, 4844-4852.	1.6	10
7	An air CO ₂ capture system based on the passive carbonation of large Ca(OH) ₂ structures. <i>Sustainable Energy and Fuels</i> , 2020, 4, 3409-3417.	2.5	30
8	A novel air reactor concept for chemical looping combustion systems operated at high pressure. <i>Chemical Engineering Journal</i> , 2020, 390, 124507.	6.6	9
9	Investigation of the Segregation of Binary Mixtures with Iron-Based Particles in a Bubbling Fluidized Bed. <i>ACS Omega</i> , 2019, 4, 9065-9073.	1.6	5
10	Kinetic Study of Belite Formation in Cement Raw Meals Used in the Calcium Looping CO ₂ Capture Process. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 5445-5454.	1.8	11
11	Recent progress of the Ca-Cu technology for decarbonisation of power plants and carbon intensive industries. <i>International Journal of Greenhouse Gas Control</i> , 2019, 85, 71-85.	2.3	22
12	A sequential approach for the economic evaluation of new CO ₂ capture technologies for power plants. <i>International Journal of Greenhouse Gas Control</i> , 2019, 84, 219-231.	2.3	27
13	Calcination kinetics of cement raw meals under various CO ₂ concentrations. <i>Reaction Chemistry and Engineering</i> , 2019, 4, 2129-2140.	1.9	15
14	Experimental testing and model validation of the calcination of calcium carbonate by the reduction of copper oxide with CH ₄ . <i>Chemical Engineering Science</i> , 2019, 193, 120-132.	1.9	8
15	Study of the calcination of CaCO ₃ by means of a Cu/CuO chemical loop using methane as fuel gas. <i>Catalysis Today</i> , 2019, 333, 176-181.	2.2	12
16	CO ₂ capture in existing power plants using second generation Ca-Looping systems firing biomass in the calciner. <i>Journal of Cleaner Production</i> , 2018, 187, 638-649.	4.6	26
17	Characterization of a Marl-Type Cement Raw Meal as CO ₂ Sorbent for Calcium Looping. <i>ACS Omega</i> , 2018, 3, 15229-15234.	1.6	6
18	Integration of a fluidised bed Ca-Cu chemical looping process in a steel mill. <i>Energy</i> , 2018, 163, 570-584.	4.5	32

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19	Carbonation of Fine CaO Particles in a Drop Tube Reactor. Industrial & Engineering Chemistry Research, 2018, 57, 13372-13380.	1.8	20
20	Determination of the solid concentration in a binary mixture from pressure drop measurements. Powder Technology, 2018, 338, 608-613.	2.1	11
21	Effect of the Carbonation Temperature on the CO ₂ Carrying Capacity of CaO. Industrial & Engineering Chemistry Research, 2018, 57, 12595-12599.	1.8	56
22	Calcium looping performance under extreme oxy-fuel combustion conditions in the calciner. Fuel, 2018, 222, 711-717.	3.4	44
23	Measuring attrition properties of calcium looping materials in a 30 kW pilot plant. Powder Technology, 2018, 336, 273-281.	2.1	21
24	Continuous CaO/Ca(OH) ₂ Fluidized Bed Reactor for Energy Storage: First Experimental Results and Reactor Model Validation. Industrial & Engineering Chemistry Research, 2017, 56, 844-852.	1.8	46
25	CO ₂ Capture by Calcium Looping at Relevant Conditions for Cement Plants: Experimental Testing in a 30 kW Pilot Plant. Industrial & Engineering Chemistry Research, 2017, 56, 2634-2640.	1.8	53
26	Overview of the Ca-Cu looping process for hydrogen production and/or power generation. Current Opinion in Chemical Engineering, 2017, 17, 1-8.	3.8	34
27	Evolution of the CO ₂ carrying capacity of CaO particles in a large calcium looping pilot plant. International Journal of Greenhouse Gas Control, 2017, 62, 69-75.	2.3	23
28	Study of a Cu-CuO chemical loop for the calcination of CaCO ₃ in a fixed bed reactor. Chemical Engineering Journal, 2017, 325, 208-220.	6.6	29
29	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
30	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
31	Modelling a Calciner with High Inlet Oxygen Concentration for a Calcium Looping Process. Energy Procedia, 2017, 114, 242-249.	1.8	9
32	Proof of concept of the CaO/Ca(OH) ₂ reaction in a continuous heat-exchanger BFB reactor for thermochemical heat storage in CSP plants. AIP Conference Proceedings, 2017, , .	0.3	7
33	Calcium looping CO ₂ capture system for back-up power plants. Energy and Environmental Science, 2017, 10, 1994-2004.	15.6	62
34	Integration of Ca-Looping Systems for CO ₂ Capture in Cement Plants. Energy Procedia, 2017, 114, 6206-6214.	1.8	31
35	Operating Experience in la Pereda 1.7 MWth Calcium Looping Pilot. Energy Procedia, 2017, 114, 149-157.	1.8	18
36	Screening CO ₂ Capture Test for Cement Plants Using a Lab Scale Calcium Looping Pilot Facility. Energy Procedia, 2017, 114, 53-56.	1.8	3

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37	Sorption enhanced reforming of methane combined with an iron oxide chemical loop for the production of hydrogen with CO ₂ capture: Conceptual design and operation strategy. Applied Thermal Engineering, 2017, 125, 811-822.	3.0	17
38	On the climate change mitigation potential of CO ₂ conversion to fuels. Energy and Environmental Science, 2017, 10, 2491-2499.	15.6	225
39	CO ₂ Carrying Capacities of Cement Raw Meals in Calcium Looping Systems. Energy & Fuels, 2017, 31, 13955-13962.	2.5	14
40	Experimental investigation and model validation of a CaO/Ca(OH) ₂ fluidized bed reactor for thermochemical energy storage applications. Chemical Engineering Journal, 2017, 313, 1194-1205.	6.6	81
41	Reactor Design for Sorption-Enhanced Reforming Using Ca Cu Chemical Loops. Advances in Chemical Engineering, 2017, 51, 207-260.	0.5	4
42	Enhancement of a CaO/Ca(OH) ₂ based material for thermochemical energy storage. Solar Energy, 2016, 135, 800-809.	2.9	73
43	Experimental testing of a sorbent reactivation process in La Pereda 1.7 MWth calcium looping pilot plant. International Journal of Greenhouse Gas Control, 2016, 50, 14-22.	2.3	40
44	Analysis of a double calcium loop process configuration for CO ₂ capture in cement plants. Journal of Cleaner Production, 2016, 117, 110-121.	4.6	47
45	Investigation of a Fixed-Bed Reactor for the Calcination of CaCO ₃ by the Simultaneous Reduction of CuO with a Fuel Gas. Industrial & Engineering Chemistry Research, 2016, 55, 5128-5132.	1.8	33
46	CO ₂ capture from the calcination of CaCO ₃ using iron oxide as a heat carrier. Journal of Cleaner Production, 2016, 112, 1211-1217.	4.6	46
47	Calcium looping reactor design for fluidized-bed systems. , 2015, , 107-138.		1
48	Emerging CO ₂ capture systems. International Journal of Greenhouse Gas Control, 2015, 40, 126-166.	2.3	352
49	Special Issue commemorating the 10th year anniversary of the publication of the Intergovernmental Panel on Climate Change Special Report on CO ₂ Capture and Storage. International Journal of Greenhouse Gas Control, 2015, 40, 1-5.	2.3	42
50	Composite Material for Thermochemical Energy Storage Using CaO/Ca(OH) ₂ . Industrial & Engineering Chemistry Research, 2015, 54, 9314-9327.	1.8	41
51	Sulfation Rates of Particles in Calcium Looping Reactors. Chemical Engineering and Technology, 2014, 37, 15-19.	0.9	13
52	Process design of a hydrogen production plant from natural gas with CO ₂ capture based on a novel Ca/Cu chemical loop. Applied Energy, 2014, 114, 192-208.	5.1	84
53	Carbon capture and storage update. Energy and Environmental Science, 2014, 7, 130-189.	15.6	1,765
54	Sulfation Performance of CaO Purges Derived from Calcium Looping CO ₂ Capture Systems. Energy & Fuels, 2014, 28, 1325-1330.	2.5	11

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55	Conceptual design of a Ni-based chemical looping combustion process using fixed-beds. Applied Energy, 2014, 135, 309-319.	5.1	39
56	Biomass combustion with in situ CO ₂ capture by CaO in a 300 kW th circulating fluidized bed facility. International Journal of Greenhouse Gas Control, 2014, 29, 142-152.	2.3	44
57	Oxy-fired fluidized bed combustors with a flexible power output using circulating solids for thermal energy storage. Applied Energy, 2014, 132, 127-136.	5.1	28
58	Determination of CaO Carbonation Kinetics under Recarbonation Conditions. Energy & Fuels, 2014, 28, 4033-4042.	2.5	58
59	Kinetics of the CaO/Ca(OH) ₂ Hydration/Dehydration Reaction for Thermochemical Energy Storage Applications. Industrial & Engineering Chemistry Research, 2014, 53, 12594-12601.	1.8	133
60	Design of a Novel Fluidized Bed Reactor To Enhance Sorbent Performance in CO ₂ Capture Systems Using CaO. Industrial & Engineering Chemistry Research, 2014, 53, 10059-10071.	1.8	33
61	Conceptual process design of a CaO/Ca(OH) ₂ thermochemical energy storage system using fluidized bed reactors. Applied Thermal Engineering, 2014, 73, 1087-1094.	3.0	82
62	Undesired effects in the determination of CO ₂ carrying capacities of CaO during TG testing. Fuel, 2014, 127, 52-61.	3.4	62
63	Modeling of Cu oxidation in an adiabatic fixed-bed reactor with N ₂ recycling. Applied Energy, 2014, 113, 1945-1951.	5.1	26
64	Process and Cost Analysis of a Biomass Power Plant with in Situ Calcium Looping CO ₂ Capture Process. Industrial & Engineering Chemistry Research, 2014, 53, 10721-10733.	1.8	18
65	Calcium Looping with Enhanced Sorbent Performance: Experimental Testing in A Large Pilot Plant. Energy Procedia, 2014, 63, 2060-2069.	1.8	11
66	Investigation of SO ₂ Capture in a Circulating Fluidized Bed Carbonator of a Ca Looping Cycle. Industrial & Engineering Chemistry Research, 2013, 52, 2700-2706.	1.8	16
67	Demonstration of steady state CO ₂ capture in a 1.7MWth calcium looping pilot. International Journal of Greenhouse Gas Control, 2013, 18, 237-245.	2.3	279
68	The impact of calcium sulfate and inert solids accumulation in post-combustion calcium looping systems. Fuel, 2013, 109, 184-190.	3.4	30
69	Testing postcombustion CO ₂ capture with CaO in a 1.7 MWt pilot facility. Energy Procedia, 2013, 37, 1-8.	1.8	55
70	Calcium looping for CO ₂ capture in combustion systems. , 2013, , 931-970.		4
71	Design of a hydrogen production process for power generation based on a Ca-Cu chemical loop. Energy Procedia, 2013, 37, 626-634.	1.8	10
72	Modelling the continuous calcination of CaCO ₃ in a Ca-looping system. Chemical Engineering Journal, 2013, 215-216, 174-181.	6.6	68

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73	Modeling of Cu oxidation in adiabatic fixed-bed reactor with N ₂ recycling in a Ca/Cu chemical loop. <i>Chemical Engineering Journal</i> , 2013, 232, 442-452.	6.6	29
74	Integrated combined cycle from natural gas with CO ₂ capture using a Ca-Cu chemical loop. <i>AIChE Journal</i> , 2013, 59, 2780-2794.	1.8	38
75	Reduction Kinetics of a High Load Cu-based Pellet Suitable for Ca/Cu Chemical Loops. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 1481-1490.	1.8	35
76	Modeling of sorption enhanced steam methane reforming in an adiabatic fixed bed reactor. <i>Chemical Engineering Science</i> , 2012, 84, 1-11.	1.9	86
77	Modeling of sorption enhanced steam methane reforming—Part II: Simulation within a novel Ca/Cu chemical loop process for hydrogen production. <i>Chemical Engineering Science</i> , 2012, 84, 12-20.	1.9	65
78	The Effect of Steam on the Fast Carbonation Reaction Rates of CaO. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 2478-2482.	1.8	71
79	Kinetics of Calcination of Partially Carbonated Particles in a Ca-Looping System for CO ₂ Capture. <i>Energy & Fuels</i> , 2012, 26, 1432-1440.	2.5	126
80	Modeling the solids circulation rates and solids inventories of an interconnected circulating fluidized bed reactor system for CO ₂ capture by calcium looping. <i>Chemical Engineering Journal</i> , 2012, 198-199, 228-235.	6.6	20
81	Conceptual design of a hydrogen production process from natural gas with CO ₂ capture using a Ca-Cu chemical loop. <i>International Journal of Greenhouse Gas Control</i> , 2012, 6, 126-141.	2.3	114
82	CO ₂ Capture from Cement Plants Using Oxyfired Precalcination and/or Calcium Looping. <i>Environmental Science & Technology</i> , 2012, 46, 2460-2466.	4.6	94
83	Post-combustion calcium looping process with a highly stable sorbent activity by recarbonation. <i>Energy and Environmental Science</i> , 2012, 5, 7353.	15.6	92
84	Sulfation rates of cycled CaO particles in the carbonator of a Ca-looping cycle for postcombustion CO ₂ capture. <i>AIChE Journal</i> , 2012, 58, 2262-2269.	1.8	27
85	Evaluation of CO ₂ Carrying Capacity of Reactivated CaO by Hydration. <i>Energy & Fuels</i> , 2011, 25, 1294-1301.	2.5	62
86	Biomass Combustion with in Situ CO ₂ Capture with CaO. I. Process Description and Economics. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 6972-6981.	1.8	18
87	Experimental Validation of the Calcium Looping CO ₂ Capture Process with Two Circulating Fluidized Bed Carbonator Reactors. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 9685-9695.	1.8	155
88	Model for Self-Reactivation of Highly Sintered CaO Particles during CO ₂ Capture Looping Cycles. <i>Energy & Fuels</i> , 2011, 25, 1926-1930.	2.5	30
89	Biomass Combustion with in Situ CO ₂ Capture by CaO. II. Experimental Results. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 6982-6989.	1.8	23
90	Precalcination of CaCO ₃ as a Method to Stabilize CaO Performance for CO ₂ Capture from Combustion Gases. <i>Energy & Fuels</i> , 2011, 25, 5521-5527.	2.5	19

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91	Analysis of a Process for Capturing the CO ₂ Resulting from the Precalcination of Limestone in a Cement Plant. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 2126-2132.	1.8	28
92	Experimental investigation of a circulating fluidized-bed reactor to capture CO ₂ with CaO. <i>AIChE Journal</i> , 2011, 57, 1356-1366.	1.8	141
93	Integration of a Ca looping system for CO ₂ capture in existing power plants. <i>AIChE Journal</i> , 2011, 57, 2599-2607.	1.8	78
94	An analysis of the effect of carbonation conditions on CaO deactivation curves. <i>Chemical Engineering Journal</i> , 2011, 167, 255-261.	6.6	95
95	Comparison of experimental results from three dual fluidized bed test facilities capturing CO ₂ with CaO. <i>Energy Procedia</i> , 2011, 4, 393-401.	1.8	69
96	Calcium looping for CO ₂ capture: sorbent enhancement through doping. <i>Energy Procedia</i> , 2011, 4, 402-409.	1.8	48
97	Capture of CO ₂ during low temperature biomass combustion in a fluidized bed using CaO. Process description, experimental results and economics. <i>Energy Procedia</i> , 2011, 4, 795-802.	1.8	9
98	Postcombustion CO ₂ capture with CaO. Status of the technology and next steps towards large scale demonstration. <i>Energy Procedia</i> , 2011, 4, 852-859.	1.8	78
99	Integration of a Ca-looping system for CO ₂ capture in an existing power plant. <i>Energy Procedia</i> , 2011, 4, 1699-1706.	1.8	34
100	Experimental validation of in situ CO ₂ capture with CaO during the low temperature combustion of biomass in a fluidized bed reactor. <i>International Journal of Greenhouse Gas Control</i> , 2011, 5, 512-520.	2.3	19
101	Conceptual design of a three fluidised beds combustion system capturing CO ₂ with CaO. <i>International Journal of Greenhouse Gas Control</i> , 2011, 5, 498-504.	2.3	53
102	Carbon dioxide capture from combustion flue gases with a calcium oxide chemical loop. Experimental results and process development. <i>International Journal of Greenhouse Gas Control</i> , 2010, 4, 167-173.	2.3	124
103	Average activity of CaO particles in a calcium looping system. <i>Chemical Engineering Journal</i> , 2010, 156, 388-394.	6.6	90
104	Sorbent attrition in a carbonation/calcination pilot plant for capturing CO ₂ from flue gases. <i>Fuel</i> , 2010, 89, 2918-2924.	3.4	71
105	Effect of sorbent hydration on the average activity of CaO in a Ca-looping system. <i>Chemical Engineering Journal</i> , 2010, 163, 324-330.	6.6	78
106	New CO ₂ Capture Process for Hydrogen Production Combining Ca and Cu Chemical Loops. <i>Environmental Science & Technology</i> , 2010, 44, 6901-6904.	4.6	148
107	Application of the random pore model to the carbonation cyclic reaction. <i>AIChE Journal</i> , 2009, 55, 1246-1255.	1.8	199
108	Modelling of a fluidized bed carbonator reactor to capture CO ₂ from a combustion flue gas. <i>Chemical Engineering Science</i> , 2009, 64, 883-891.	1.9	107

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109	Analysis of a process to capture the CO ₂ resulting from the pre-calcination of the limestone feed to a cement plant. Energy Procedia, 2009, 1, 141-148.	1.8	15
110	Capturing CO ₂ from combustion flue gases with a carbonation calcination loop. Experimental results and process development. Energy Procedia, 2009, 1, 1147-1154.	1.8	52
111	Effect of Partial Carbonation on the Cyclic CaO Carbonation Reaction. Industrial & Engineering Chemistry Research, 2009, 48, 9090-9096.	1.8	28
112	Postcombustion Capture of CO ₂ with CaO in a Circulating Fluidized Bed Carbonator. , 2009, , 549-554.		2
113	Reactivity of highly cycled particles of CaO in a carbonation/calcination loop. Chemical Engineering Journal, 2008, 137, 561-567.	6.6	152
114	Heat requirements in a calciner of CaCO ₃ integrated in a CO ₂ capture system using CaO. Chemical Engineering Journal, 2008, 138, 148-154.	6.6	120
115	Lime enhanced gasification of solid fuels: Examination of a process for simultaneous hydrogen production and CO ₂ capture. Fuel, 2008, 87, 1678-1686.	3.4	91
116	Oxyfuel carbonation/calcination cycle for low cost CO ₂ capture in existing power plants. Energy Conversion and Management, 2008, 49, 2809-2814.	4.4	184
117	Process for Capturing CO ₂ Arising from the Calcination of the CaCO ₃ Used in Cement Manufacture. Environmental Science & Technology, 2008, 42, 6980-6984.	4.6	69
118	Sulfation of CaO Particles in a Carbonation/Calcination Loop to Capture CO ₂ . Industrial & Engineering Chemistry Research, 2008, 47, 1630-1635.	1.8	84
119	Modeling of the Deactivation of CaO in a Carbonate Loop at High Temperatures of Calcination. Industrial & Engineering Chemistry Research, 2008, 47, 9256-9262.	1.8	64
120	CO ₂ Looping Cycle Performance of a High-Purity Limestone after Thermal Activation/Doping. Energy & Fuels, 2008, 22, 3258-3264.	2.5	100
121	NOVEL CO ₂ CONTROL METHOD BY MEANS OF CO ₂ CHEMICAL LOOPING. International Journal of Energy for A Clean Environment, 2008, 9, 91-101.	0.6	0
122	Economics of CO ₂ Capture Using the Calcium Cycle with a Pressurized Fluidized Bed Combustor. Energy & Fuels, 2007, 21, 920-926.	2.5	184
123	Comparison of CaO-Based Synthetic CO ₂ Sorbents under Realistic Calcination Conditions. Energy & Fuels, 2007, 21, 3560-3562.	2.5	80
124	Cost Structure of a Postcombustion CO ₂ Capture System Using CaO. Environmental Science & Technology, 2007, 41, 5523-5527.	4.6	227
125	Narrow particle beds arranged to exchange heat between a combustion chamber and a  http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsev. Chemical	1.9	27
126	CO ₂ Capture Capacity of CaO in Long Series of Carbonation/Calcination Cycles. Industrial & Engineering Chemistry Research, 2006, 45, 8846-8851.	1.8	641

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127	Novel Capture Processes. Oil and Gas Science and Technology, 2005, 60, 497-508.	1.4	42
128	Fluidized Bed Combustion Systems Integrating CO ₂ Capture with CaO. Environmental Science & Technology, 2005, 39, 2861-2866.	4.6	383
129	Pore-Size and Shape Effects on the Recarbonation Performance of Calcium Oxide Submitted to Repeated Calcination/Recarbonation Cycles. Energy & Fuels, 2005, 19, 270-278.	2.5	177
130	Determination of the Critical Product Layer Thickness in the Reaction of CaO with CO ₂ . Industrial & Engineering Chemistry Research, 2005, 44, 5608-5615.	1.8	337
131	Capture of CO ₂ with CaO in a pilot fluidized bed carbonator experimental results and reactor model. , 2005, , 1107-1113.		1
132	Investigation of the solid flow between two fluidized beds connected by an orifice. Chemical Engineering Science, 2004, 59, 5869-5872.	1.9	6
133	Capture of CO ₂ from combustion gases in a fluidized bed of CaO. AIChE Journal, 2004, 50, 1614-1622.	1.8	328
134	Oxidative dehydrogenation of butane in an interconnected fluidized-bed reactor. AIChE Journal, 2004, 50, 1510-1522.	1.8	27
135	Clean and efficient use of petroleum coke for combustion and power generation. Fuel, 2004, 83, 1341-1348.	3.4	129
136	Sorbent Cost and Performance in CO ₂ Capture Systems. Industrial & Engineering Chemistry Research, 2004, 43, 3462-3466.	1.8	290
137	Enhancement of CaO for CO ₂ capture in an FBC environment. Chemical Engineering Journal, 2003, 96, 187-195.	6.6	257
138	Conversion Limits in the Reaction of CO ₂ with Lime. Energy & Fuels, 2003, 17, 308-315.	2.5	650
139	Progress of Sulfation in Highly Sulfated Particles of Lime. Industrial & Engineering Chemistry Research, 2003, 42, 1840-1844.	1.8	17
140	A Simulation Study for Fluidized Bed Combustion of Petroleum Coke With CO ₂ Capture. , 2003, , 603.		4
141	In-Situ Capture of CO ₂ in a Fluidized Bed Combustor. , 2003, , 133.		19
142	Novel Combustion Cycles Incorporating Capture of CO ₂ with CaO. , 2003, , 181-186.		12
143	The maximum capture efficiency of CO ₂ using a carbonation/calcination cycle of CaO/CaCO ₃ . Chemical Engineering Journal, 2002, 90, 303-306.	6.6	456
144	The use of two different models to describe the axial mixing of solids in fluidised beds. Chemical Engineering Science, 2002, 57, 2791-2798.	1.9	15

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145	Determination of Biomass Char Combustion Reactivities for FBC Applications by a Combined Method. Industrial & Engineering Chemistry Research, 2001, 40, 4317-4323.	1.8	62
146	Modeling the Axial and Lateral Mixing of Solids in Fluidized Beds. Industrial & Engineering Chemistry Research, 2001, 40, 5656-5665.	1.8	13
147	A calibration procedure to obtain solid concentrations from digital images of bulk powders. Powder Technology, 2001, 114, 125-128.	2.1	30
148	An extended version of the countercurrent backmixing model suitable for solid mixing in two-dimensional fluidised beds. Powder Technology, 2001, 120, 113-119.	2.1	2
149	Residual activity of sorbent particles with a long residence time in a CFBC. AIChE Journal, 2000, 46, 1888-1893.	1.8	24
150	Structural changes in zinc ferrites as regenerable sorbents for hot coal gas desulfurization. Solid State Ionics, 2000, 138, 51-62.	1.3	68
151	Modeling of Carbon Combustion Efficiency in Circulating Fluidized Bed Combustors. 2. Model Validation and Simulation. Industrial & Engineering Chemistry Research, 1995, 34, 3139-3145.	1.8	0
152	A mathematical model for segregation of limestone-coal mixtures in slugging fluidised beds. Chemical Engineering Science, 1994, 49, 3943-3953.	1.9	13
153	Methods for characterization of sorbents used in fluidized bed boilers. Fuel, 1994, 73, 355-362.	3.4	32
154	Determination of coal combustion reactivities by burnout time measurements in a batch fluidized bed. Fuel, 1994, 73, 287-293.	3.4	12
155	Effect of formulation of steady-state heat balance for char particles on AFBC modelling. Fuel, 1993, 72, 1335-1342.	3.4	5
156	Modeling of lignite combustion in atmospheric fluidized bed combustors. 2. Model validation and simulation. Industrial & Engineering Chemistry Research, 1992, 31, 2296-2303.	1.8	4
157	Modeling of lignite combustion in atmospheric fluidized bed combustors. 1. Selection of submodels and sensitivity analysis. Industrial & Engineering Chemistry Research, 1992, 31, 2286-2296.	1.8	14
158	Carbon efficiency in atmospheric fluidized bed combustion of lignites. Fuel, 1992, 71, 417-424.	3.4	5
159	Minimum fluidization velocities of fluidized-bed coal-combustion solids. Powder Technology, 1991, 67, 113-119.	2.1	28
160	Model of mixing and segregation for straw/sand mixtures in fluidized beds. Powder Technology, 1988, 56, 149-155.	2.1	29
161	Fluidization velocities of sand/straw binary mixtures. Powder Technology, 1987, 52, 1-6.	2.1	23