Cong Luo

List of Publications by Year
in descending order

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Version: 2024-02-01

78 papers	2,502 citations	159525 30 h-index	223716 46 g-index
78 all docs	78 docs citations	78 times ranked	1280 citing authors

#	Article	IF	Citations
1	Development and Performance of CaO/La₂O₃Sorbents during Calcium Looping Cycles for CO₂Capture. Industrial & Engineering Chemistry Research, 2010, 49, 11778-11784.	1.8	156
2	Effect of lignin, cellulose and hemicellulose on calcium looping behavior of CaO-based sorbents derived from extrusion-spherization method. Chemical Engineering Journal, 2018, 334, 2520-2529.	6.6	98
3	Manufacture of calcium-based sorbents for high temperature cyclic CO2 capture via a solâ€“gel process. International Journal of Greenhouse Gas Control, 2013, 12, 193-199.	2.3	80
4	A novel composite perovskite-based material for chemical-looping steam methane reforming to hydrogen and syngas. Energy Conversion and Management, 2018, 171, 12-19.	4.4	79
5	Tailor-Made Coreâ€“Shell CaO/TiO₂â€“Al₂O₃ Architecture as a High-Capacity and Long-Life CO₂ Sorbent. Environmental Science & Technology, 2015, 49, 8237-8245.	4.6	76
6	Sorption enhanced steam reforming of ethanol over Ni-based catalyst coupling with high-performance CaO pellets. Chemical Engineering Journal, 2021, 406, 126903.	6.6	76
7	Wet mixing combustion synthesis of CaO-based sorbents for high temperature cyclic CO2 capture. Chemical Engineering Journal, 2015, 267, 111-116.	6.6	75
8	Characteristics and performance of CaO-based high temperature CO₂ sorbents derived from a solâ€“gel process with different supports. RSC Advances, 2016, 6, 79285-79296.	1.7	75
9	Enhanced cyclic stability of CO2 adsorption capacity of CaO-based sorbents using La2O3 or Ca12Al14O33 as additives. Korean Journal of Chemical Engineering, 2011, 28, 1042-1046.	1.2	67
10	Advances in applications of ionic liquids for phase change CO2 capture. Chemical Engineering Journal, 2022, 445, 136767.	6.6	60
11	Effect of Support Material on Carbonation and Sulfation of Synthetic CaO-Based Sorbents in Calcium Looping Cycle. Energy & Fuels, 2013, 27, 4824-4831.	2.5	59
12	Low energy-consuming CO2 capture by phase change absorbents of amine/alcohol/H2O. Separation and Purification Technology, 2021, 275, 119181.	3.9	59
13	Macropore-Stabilized Limestone Sorbents Prepared by the Simultaneous Hydrationâ€“Impregnation Method for High-Temperature CO₂ Capture. Energy & Fuels, 2016, 30, 3219-3226.	2.5	57
14	Effect of H2O/CO2 mixture on heat transfer characteristics of pulverized coal MILD-oxy combustion. Fuel Processing Technology, 2019, 184, 27-35.	3.7	56
15	Structure and surface insight into a temperature-sensitive CaO-based CO2 sorbent. Chemical Engineering Journal, 2022, 435, 134960.	6.6	56
16	Effect of sulfation on CO2 capture of CaO-based sorbents during calcium looping cycle. Fuel, 2014, 127, 124-130.	3.4	52
17	Development of BaSrCo-based perovskite for chemical-looping steam methane reforming: A study on synergistic effects of A-site elements and CeO2 support. Fuel, 2019, 253, 311-319.	3.4	49
18	Fundamental and Technical Challenges for a Compatible Design Scheme of Oxyfuel Combustion Technology. Engineering, 2015, 1, 139-149.	3.2	48

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19	Potential Synergy of Chlorine and Potassium and Sodium Elements in Carbonation Enhancement of CaO-Based Sorbents. ACS Sustainable Chemistry and Engineering, 2018, 6, 11677-11684.	3.2	47
20	Enhancing the performance of CaO/CuO based composite for CO2 capture in a combined Caâ€“Cu chemical looping process. Chemical Engineering Journal, 2013, 228, 75-86.	6.6	45
21	Calcium Looping for CO₂ Capture at a Constant High Temperature. Energy & Fuels, 2014, 28, 307-318.	2.5	43
22	Porous spherical calcium-based sorbents prepared by a bamboo templating method for cyclic CO2 capture. Fuel, 2018, 219, 94-102.	3.4	43
23	CFD modeling on char surface reaction behavior of pulverized coal MILD-oxy combustion: Effects of oxygen and steam. Fuel Processing Technology, 2020, 204, 106405.	3.7	41
24	Natural Calciumâ€Based Sorbents Doped with Sea Salt for Cyclic CO₂ Capture. Chemical Engineering and Technology, 2017, 40, 522-528.	0.9	40
25	SGCS-made ultrafine CaO/Al2O3 sorbent for cyclic CO2 capture. Chinese Chemical Letters, 2011, 22, 615-618.	4.8	39
26	Numerical investigation of the effects of different injection parameters on DamkÃ¶hler number in the natural gas MILD combustion. Fuel, 2019, 237, 60-70.	3.4	38
27	Morphological Changes of Pure Microâ€and Nanoâ€Sized CaCO₃during a Calcium Looping Cycle for CO₂ Capture. Chemical Engineering and Technology, 2012, 35, 547-554.	0.9	35
28	Development and performance of binder-supported CaSO4 oxygen carriers for chemical looping combustion. Chemical Engineering Journal, 2011, 171, 1018-1026.	6.6	34
29	Study on the effect of NaBr modification on CaO-based sorbent for CO2 capture and SO2 capture. Carbon Capture Science & Technology, 2021, 1, 100015.	4.9	33
30	Effect of hematite addition to CaSO₄ oxygen carrier in chemical looping combustion of coal char. RSC Advances, 2015, 5, 56362-56376.	1.7	32
31	Oxygen desorption behavior of sol-gel derived perovskite-type oxides in a pressurized fixed bed reactor. Chemical Engineering Journal, 2017, 323, 340-346.	6.6	32
32	Computational study on the effect of gasification reaction on pulverized coal MILD combustion diluted by N2 and CO2. Applied Thermal Engineering, 2019, 158, 113806.	3.0	32
33	Glycine tailored effective CaO-based heat carriers for thermochemical energy storage in concentrated solar power plants. Energy Conversion and Management, 2021, 250, 114886.	4.4	29
34	Chemical looping combustion of lignite with the CaSO4â€“CoO mixed oxygen carrier. Journal of the Energy Institute, 2020, 93, 1229-1241.	2.7	28
35	Na2CO3 promoted CaO-based heat carrier for thermochemical energy storage in concentrated solar power plants. Chemical Engineering Journal, 2022, 435, 134852.	6.6	28
36	Cyclic CO2 capture characteristics of a pellet derived from sol-gel CaO powder with Ca12Al14O33 support. Korean Journal of Chemical Engineering, 2015, 32, 934-938.	1.2	27

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37	Effect of A/B-site substitution on oxygen production performance of strontium cobalt based perovskites for CO₂ capture application. RSC Advances, 2015, 5, 39785-39790.	1.7	27
38	Absorption performance and reaction mechanism study on a novel anhydrous phase change absorbent for CO2 capture. Chemical Engineering Journal, 2021, 420, 129897.	6.6	27
39	Synthesis and characteristics of BaSrCoFe-based perovskite as a functional material for chemical looping gasification of coal. International Journal of Hydrogen Energy, 2016, 41, 22846-22855.	3.8	25
40	NO Removal from Flue Gas Using Conventional Imidazolium-Based Ionic Liquids at High Pressures. Energy & Fuels, 2018, 32, 6039-6048.	2.5	25
41	Heterogeneous reactions behaviors of pulverized coal MILD combustion under different injection conditions. Fuel, 2020, 275, 117925.	3.4	25
42	Development and characterization of Ba1â^'xSrxCo0.8Fe0.2O3â^'Î´ perovskite for oxygen production in oxyfuel combustion system. Chemical Engineering Journal, 2014, 255, 462-470.	6.6	24
43	Investigation on the thermodynamic calculation of a 35â€¯MWth oxy-fuel combustion coal-fired boiler. International Journal of Greenhouse Gas Control, 2018, 71, 36-45.	2.3	24
44	Development of LaFeO3 modified with potassium as catalyst for coal char CO2 gasification. Journal of CO2 Utilization, 2019, 32, 163-169.	3.3	24
45	NaBr-Enhanced CaO-Based Sorbents with a Macropore-Stabilized Microstructure for CO₂ Capture. Energy & Fuels, 2018, 32, 8571-8578.	2.5	22
46	Increasing Porosity of Molded Calciumâ€Based Sorbents by Glucose Templating forÂCyclic CO₂ Capture. Chemical Engineering and Technology, 2018, 41, 956-963.	0.9	21
47	Effect of Acid Gases on Elemental Mercury Removal in an Oxy-fuel CO₂ Compression Process. Energy & Fuels, 2018, 32, 4334-4340.	2.5	21
48	Development of a cordierite monolith reactor coated with CeO2-supported BaSrCo-based perovskite for chemical looping steam methane reforming. Fuel Processing Technology, 2021, 220, 106889.	3.7	20
49	Effect of Sulfation during Oxy-Fuel Calcination Stage in Calcium Looping on CO₂ Capture Performance of CaO-Based Sorbents. Energy & Fuels, 2013, 27, 1008-1014.	2.5	19
50	High-efficiency CuCe(rod) catalysts for CO2 hydrogenation with high Cu content. Fuel, 2020, 276, 118135.	3.4	19
51	Effect of steam addition on turbulence-chemistry interaction behaviors of pulverized coal MILD-oxy combustion. Fuel, 2021, 294, 120496.	3.4	19
52	NO formation mechanism of CH4/NH3 jet flames in hot co-flow under MILD-oxy condition: Effects of co-flow CO2 and H2O. Fuel, 2022, 313, 123030.	3.4	19
53	Reaction behaviors of a single coal char particle affected by oxygen and steam under oxy-fuel combustion. Fuel, 2021, 291, 120229.	3.4	18
54	Combustion regimes and fuel-NO mechanism of CH4/NH3 jet diffusion flames in hot O2/CO2 co-flow. Fuel Processing Technology, 2022, 229, 107173.	3.7	18

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55	Investigation into compound CaSO4 oxygen carrier for chemical-looping combustion. Journal of Fuel Chemistry and Technology, 2011, 39, 161-168.	0.9	17
56	Development and Testing of an Interconnected FluidizedâEBed System for Chemical Looping Combustion. Chemical Engineering and Technology, 2012, 35, 532-538.	0.9	15
57	Effect of different organic compounds on the preparation of CaO-based CO2 sorbents derived from wet mixing combustion synthesis. Chinese Journal of Chemical Engineering, 2021, 36, 157-169.	1.7	15
58	Improved quasi-cycle capacity method based on microcalorimetry strategy for the fast screening of amino acid salt absorbents for CO2 capture. Separation and Purification Technology, 2022, 289, 120767.	3.9	15
59	Promotion effects of oxygen vacancies on activity of Na-doped CeO2 catalysts for reverse water gas shift reaction. Applied Surface Science, 2022, 587, 152881.	3.1	15
60	Effect of Sodium Bromide on CaO-Based Sorbents Derived from Three Kinds of Sources for CO2 Capture. ACS Omega, 2020, 5, 17908-17917.	1.6	13
61	Characteristics of SrCo1-xFexO3-Î´Perovskite Powders with Improved O2/CO2Production Performance for Oxyfuel Combustion. Bulletin of the Korean Chemical Society, 2014, 35, 1613-1618.	1.0	13
62	Reaction Characteristic Investigation of the Combined Template-Method-Made CaSO₄â€“Mn₃O₄ Mixed Oxygen Carrier with Lignite. Energy & Fuels, 2019, 33, 8954-8966.	2.5	11
63	Screening loaded perovskite oxygen carriers for chemical looping steam methane reforming. Journal of Environmental Chemical Engineering, 2022, 10, 107315.	3.3	10
64	Numerical study on heterogeneous reaction characteristics of a single coal char particle under air- and oxy-fuel combustion: Effects of particle motion. Fuel, 2022, 320, 123919.	3.4	10
65	Optimization of sol-gel combustion synthesis for calcium looping CO2 sorbents, part â...: Effects of sol-gel preparation and combustion conditions. Separation and Purification Technology, 2022, 292, 121081.	3.9	10
66	Coal-direct chemical looping hydrogen generation with BaMnO3 perovskite oxygen carrier. Fuel Processing Technology, 2022, 233, 107296.	3.7	9
67	The potential oxidation characteristics of CaCr2O4 during coal combustion with solid waste in a fluidized bed boiler: A thermogravimetric analysis. Chemosphere, 2021, 263, 127974.	4.2	8
68	Effects of acidic gases and operation parameters on denitrification in oxy-fuel CO2 compression process. Fuel, 2018, 234, 1285-1292.	3.4	6
69	Experimental Investigation and Process Simulation of Oxy-fuel Flue Gas Denitrification in CO₂ Compression Process. Energy & Fuels, 2018, 32, 11666-11673.	2.5	4
70	CO2 hydrogenation on CeO2@Cu catalyst synthesized via a solution auto-combustion method. Journal of CO2 Utilization, 2021, 54, 101757.	3.3	3
71	Optimization of solâ€“gel combustion synthesis of calcium looping CO2 sorbents, Part â...¡: Effects of thermal activation conditions. Separation and Purification Technology, 2022, 292, 121061.	3.9	3
72	Oxygen Production for Oxy-fuel Combustion. , 2018, , 263-287.		2

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73	Cyclic CO2 Capture Behavior of Limestone Modified by Qinghai Lake Salt During Long-Term Calcium Looping Cycles. , 2017, , .		1
74	Synthesis of CeO2 Supported BaCoO3 Perovskites for Chemical-Looping Methane Reforming to Syngas and Hydrogen. , 2017, , .		1
75	Calcium Looping Technology Using Improved Stability Nanostructured Sorbent for Cyclic CO2 Capture. , 2013, , 1171-1176.		0
76	CO2 Adsorption Performance of Na/K-Impregnated MgO. Environmental Science and Engineering, 2022, , 597-606.	0.1	0
77	Development of Binder-Supported CaSO4 Oxygen Carriers for Chemical Looping Combustion of Methane. , 2013, , 1311-1319.		0
78	Different Sorbents in Calcium Looping Cycle for CO2 Capture. , 2013, , 1053-1057.		0