

CaO-based CO₂ sorbents: A review on screening, enhancement, regeneration and kinetics modelling

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Role of calcium looping conditions on the performance of natural and synthetic Ca-based materials for energy storage. <i>Journal of CO2 Utilization</i> , 2018, 28, 374-384.	3.3	110
2	Eggshell as a potential CO2 sorbent in the calcium looping gasification of biomass. <i>Waste Management</i> , 2018, 80, 274-284.	3.7	25
3	Performance of synthetic CaO-based sorbent pellets for CO2 capture and kinetic analysis. <i>Fuel</i> , 2018, 232, 205-214.	3.4	35
4	Numerical investigation of CO2 valorization via the steam gasification of biomass for producing syngas with flexible H2 to CO ratio. <i>Journal of CO2 Utilization</i> , 2018, 27, 32-41.	3.3	18
5	Preparation and Evaluation of CaO-Based CO ₂ Sorbents Deposited on Saffil Fiber Supports. <i>Energy & Fuels</i> , 2018, 32, 8631-8640.	2.5	4
6	The combined effect of H2O and SO2 on CO2 uptake and sorbent attrition during fluidised bed calcium looping. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 4379-4387.	2.4	23
7	Utilization of rice husk to enhance calcium oxide-based sorbent prepared from waste cockle shells for cyclic CO2 capture in high-temperature condition. <i>Environmental Science and Pollution Research</i> , 2019, 26, 33882-33896.	2.7	3
8	CO2 capture performance and mechanical properties of Ca(OH)2-based sorbent modified with MgO and (NH4)2HPO4 for Calcium Looping cycle. <i>Fuel</i> , 2019, 256, 115924.	3.4	5
9	A Carbide Slag-Based, Ca12Al14O33-Stabilized Sorbent Prepared by the Hydrothermal Template Method Enabling Efficient CO2 Capture. <i>Energies</i> , 2019, 12, 2617.	1.6	12
10	Improved CO ₂ Sorption Performance of Calcium Oxide (CaO) Sorbent with Nickel Oxide Additive. <i>IOP Conference Series: Earth and Environmental Science</i> , 2019, 268, 012026.	0.2	3
11	The Calcium-Looping (CaCO3/CaO) process for thermochemical energy storage in Concentrating Solar Power plants. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 113, 109252.	8.2	180
12	Inorganic carbonate composites as potential high temperature CO ₂ sorbents with enhanced cycle stability. <i>RSC Advances</i> , 2019, 9, 20273-20280.	1.7	11
13	Kinetics of Solid-Gas Reactions and Their Application to Carbonate Looping Systems. <i>Energies</i> , 2019, 12, 2981.	1.6	69
14	Porous spherical calcium aluminate-supported CaO-based pellets manufactured via biomass-templated extrusion-spheronization technique for cyclic CO2 capture. <i>Environmental Science and Pollution Research</i> , 2019, 26, 21972-21982.	2.7	13
15	Investigation of a dual cold-flow fluidized bed for calcium looping gasification process. <i>Powder Technology</i> , 2019, 353, 10-19.	2.1	10
16	Simulation of Limestone Calcination for Calcium Looping: Potential for Autothermal and Hydrogen-Producing Sorbent Regeneration. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 8636-8655.	1.8	9
17	Eggshell as a Carbon Dioxide Sorbent: Kinetics of the Calcination and Carbonation Reactions. <i>Energy & Fuels</i> , 2019, 33, 4474-4486.	2.5	14
18	Friedman method kinetic analysis of CaO-based sorbent for high-temperature thermochemical energy storage. <i>Chemical Engineering Science</i> , 2019, 200, 236-247.	1.9	33

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20	A simple and green synthesis method for Ca-adamantanecarboxylate: a novel precursor for high temperature CO ₂ capture sorbent materials. Sustainable Energy and Fuels, 2019, 3, 3318-3323.	2.5	3
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28	Simulation of autothermal hydrogen-producing limestone calcination for calcium looping in turbulent fluidized bed reactors. Chemical Engineering Science, 2020, 212, 115353.	1.9	8
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36	Particle-scale modeling of the simultaneous carbonation and sulfation in calcium looping for CO ₂ capture. Separation and Purification Technology, 2020, 252, 117439.	3.9	16

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39	Incorporation of CaO into inert supports for enhanced CO ₂ capture: A review. <i>Chemical Engineering Journal</i> , 2020, 396, 125253.	6.6	92
40	Simulation of Sorbent-Enhanced Steam Methane Reforming and Limestone Calcination in Dual Turbulent Fluidized Bed Reactors. <i>Energy & Fuels</i> , 2020, 34, 7743-7755.	2.5	4
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46	General rate equation theory for gas-solid reaction kinetics and its application to CaO carbonation. <i>Chemical Engineering Science</i> , 2020, 227, 115902.	1.9	41
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56	Toward autothermal and hydrogen-producing sorbent regeneration for calcium looping. <i>Canadian Journal of Chemical Engineering</i> , 2021, 99, 345-358.	0.9	2
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107	The long-term engineering properties and sustainability indices of dewatering hydrated lime mortars through Jacaranda seed pods. <i>Sustainable Materials and Technologies</i> , 2022, 32, e00435.	1.7	4
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