Abdelghafour Zaabout

List of Publications by Year
in descending order

42 papers	852 citations	516215 16 h-index	500791 28 g-index
42 all docs	42 docs citations	42 times ranked	628 citing authors

#	Article	IF	Citations
1	Techno-Economic assessment of natural gas pyrolysis in molten salts. Energy Conversion and Management, 2022, 253, 115187.	4.4	22
2	Gas switching technology: Economic attractiveness for chemical looping applications and scale up experience to 50 kWth. International Journal of Greenhouse Gas Control, 2022, 114, 103593.	2.3	3
3	Combined Syngas and Hydrogen Production using Gas Switching Technology. Industrial & Engineering Chemistry Research, 2021, 60, 3516-3531.	1.8	13
4	Review on Reactor Configurations for Adsorption-Based CO₂ Capture. Industrial & Engineering Chemistry Research, 2021, 60, 3779-3798.	1.8	93
5	Review of pressurized chemical looping processes for power generation and chemical production with integrated CO2 capture. Fuel Processing Technology, 2021, 214, 106684.	3.7	52
6	Study of the Cost Reductions Achievable from the Novel SARC CO₂ Capture Concept Using a Validated Reactor Model. Industrial & Engineering Chemistry Research, 2021, 60, 12390-12402.	1.8	2
7	Pressurized chemical looping methane reforming to syngas for efficient methanol production: Experimental and process simulation study. Advances in Applied Energy, 2021, 4, 100069.	6.6	8
8	Gas Switching Reforming for syngas production with iron-based oxygen carrier-the performance under pressurized conditions. International Journal of Hydrogen Energy, 2020, 45, 1267-1282.	3.8	15
9	Mapping the operating performance of a novel internally circulating fluidized bed reactor applied to chemical looping combustion. Fuel Processing Technology, 2020, 197, 106183.	3.7	15
10	Sorbents screening for post-combustion CO2 capture via combined temperature and pressure swing adsorption. Chemical Engineering Journal, 2020, 380, 122201.	6.6	55
11	Experimental demonstration of pressurized chemical looping combustion in an internally circulating reactor for power production with integrated CO2 capture. Chemical Engineering Journal, 2020, 401, 125974.	6.6	11
12	Economic assessment of the swing adsorption reactor cluster for CO2 capture from cement production. Journal of Cleaner Production, 2020, 275, 123024.	4.6	32
13	Demonstration of the Novel Swing Adsorption Reactor Cluster Concept in a Multistage Fluidized Bed with Heat-Transfer Surfaces for Postcombustion CO₂ Capture. Industrial & Engineering Chemistry Research, 2020, 59, 22281-22291.	1.8	16
14	Hydrogen production by water splitting using gas switching technology. Powder Technology, 2020, 370, 48-63.	2.1	5
15	An advancement in CO2 utilization through novel gas switching dry reforming. International Journal of Greenhouse Gas Control, 2019, 90, 102791.	2.3	15
16	Gas Switching Reforming (GSR) for syngas production with integrated CO2 capture using iron-based oxygen carriers. International Journal of Greenhouse Gas Control, 2019, 81, 170-180.	2.3	20
17	The swing adsorption reactor cluster for post-combustion CO2 capture from cement plants. Journal of Cleaner Production, 2019, 223, 692-703.	4.6	52
18	The effect of sorbent regeneration enthalpy on the performance of the novel Swing Adsorption Reactor Cluster (SARC) for post-combustion CO2 capture. Chemical Engineering Journal, 2019, 377, 119810.	6.6	11

#	Article	IF	Citations
19	The swing adsorption reactor cluster (SARC) for post combustion CO2 capture: Experimental proof-of-principle. Chemical Engineering Journal, 2019, 377, 120145.	6.6	12
20	Internally circulating fluidized-bed reactor for syngas production using chemical looping reforming. Chemical Engineering Journal, 2019, 377, 120076.	6.6	30
21	The effect of gas addition on bubble dynamics in a fluidized bed with flat vertical membranes. Chemical Engineering Journal, 2018, 344, 71-85.	6.6	6
22	Hydrogen production with integrated CO2 capture in a membrane assisted gas switching reforming reactor: Proof-of-Concept. International Journal of Hydrogen Energy, 2018, 43, 6177-6190.	3.8	39
23	A pressurized Gas Switching Combustion reactor: Autothermal operation with a CaMnO3â^'-based oxygen carrier. Chemical Engineering Research and Design, 2018, 137, 20-32.	2.7	10
24	Optimization of a Gas Switching Combustion process through advanced heat management strategies. Applied Energy, 2017, 185, 1459-1470.	5.1	17
25	Experimental investigation on the generic effects of gas permeation through flat vertical membranes. Powder Technology, 2017, 316, 207-217.	2.1	5
26	Hydrogen production with integrated CO 2 captureÂin a novel gas switching reforming reactor:ÂProof-of-concept. International Journal of Hydrogen Energy, 2017, 42, 14367-14379.	3.8	45
27	Thermodynamic assessment of the swing adsorption reactor cluster (SARC) concept for post-combustion CO 2 capture. International Journal of Greenhouse Gas Control, 2017, 60, 74-92.	2.3	25
28	The Internally Circulating Reactor (ICR) Concept Applied to Pressurized Chemical Looping Processes. Energy Procedia, 2017, 114, 446-457.	1.8	7
29	A Novel Swing Adsorption Reactor Cluster (SARC) for Cost Effective Post-combustion CO2 Capture: A Thermodynamic Assessment. Energy Procedia, 2017, 114, 2488-2496.	1.8	2
30	Autothermal operation of a pressurized Gas Switching Combustion with ilmenite ore. International Journal of Greenhouse Gas Control, 2017, 63, 175-183.	2.3	21
31	Detecting densified zone formation in membrane-assisted fluidized bed reactors through pressure measurements. Chemical Engineering Journal, 2017, 308, 1154-1164.	6.6	11
32	Innovative Internally Circulating Reactor Concept for Chemical Loopingâ€Based CO₂ Capture Processes: Hydrodynamic Investigation. Chemical Engineering and Technology, 2016, 39, 1413-1424.	0.9	19
33	Experimental demonstration of control strategies for a Gas Switching Combustion reactor for power production with integrated CO2 capture. Chemical Engineering Research and Design, 2016, 111, 342-352.	2.7	4
34	The effect of gas permeation through vertical membranes on chemical switching reforming (CSR) reactor performance. International Journal of Hydrogen Energy, 2016, 41, 8640-8655.	3.8	14
35	Heat Management in Gas Switching Combustion for Power Production with Integrated CO2 Capture. Energy Procedia, 2015, 75, 2215-2220.	1.8	3
36	A novel gas switching combustion reactor for power production with integrated CO 2 capture: Sensitivity to the fuel and oxygen carrier types. International Journal of Greenhouse Gas Control, 2015, 39, 185-193.	2.3	15

#	Article	IF	Citations
37	The effect of frictional pressure, geometry and wall friction on the modelling of a pseudo-2D bubbling fluidised bed reactor. Powder Technology, 2015, 283, 85-102.	2.1	11
38	The generality of the standard 2D TFM approach in predicting bubbling fluidized bed hydrodynamics. Powder Technology, 2013, 235, 735-746.	2.1	54
39	Experimental Demonstration of a Novel Gas Switching Combustion Reactor for Power Production with Integrated CO₂ Capture. Industrial & Engineering Chemistry Research, 2013, 52, 14241-14250.	1.8	44
40	Comparison of phenomenological and fundamental modelling approaches for predicting fluidized bed reactor performance. Powder Technology, 2012, 228, 69-83.	2.1	3
41	Solids behavior in dilute zone of a CFB riser under turbulent conditions. Particuology, 2011, 9, 598-605.	2.0	4
42	Local solid particle behavior inside the upper zone of a circulating fluidized bed riser. Advanced Powder Technology, 2011, 22, 375-382.	2.0	11