

Dawid P Hanak

List of Publications by Year in descending order

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Version: 2024-02-01

59
papers

2,105
citations

185998

28
h-index

233125

45
g-index

61
all docs

61
docs citations

61
times ranked

1683
citing authors

#	ARTICLE	IF	CITATIONS
1	Techno-economic feasibility assessment of sorption enhanced gasification of municipal solid waste for hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 6586-6604.	3.8	29
2	Process development and performance assessment of flexible calcium looping biomass gasification for production of renewable gas with adjustable composition. <i>International Journal of Energy Research</i> , 2022, 46, 6197-6215.	2.2	6
3	Direct air capture: process technology, techno-economic and socio-political challenges. <i>Energy and Environmental Science</i> , 2022, 15, 1360-1405.	15.6	176
4	Environmental life-cycle assessment of waste-coal pellets production. <i>Clean Energy</i> , 2022, 6, 1-14.	1.5	1
5	Modelling of an integrated process for atmospheric carbon dioxide capture and methanation. <i>Journal of Cleaner Production</i> , 2022, 356, 131827.	4.6	18
6	Carbon capture for decarbonisation of energy-intensive industries: a comparative review of techno-economic feasibility of solid looping cycles. <i>Frontiers of Chemical Science and Engineering</i> , 2022, 16, 1291-1317.	2.3	11
7	Unlocking the potential of pulp and paper industry to achieve carbon-negative emissions via calcium looping retrofit. <i>Journal of Cleaner Production</i> , 2021, 280, 124431.	4.6	23
8	Reaction Mechanism and Kinetics of the Sulfation of Li ₄ SiO ₄ for High-Temperature CO ₂ Adsorption. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 9386-9394.	3.2	4
9	Technoeconomic Analysis of a Fixed Bed System for Single/Two-Stage Chemical Looping Combustion. <i>Energy Technology</i> , 2021, 9, 2100538.	1.8	3
10	Techno-economic-environmental assessment of biomass oxy-gasification staged oxy-combustion for negative emission combined heat and power. <i>Applied Thermal Engineering</i> , 2021, 196, 117254.	3.0	16
11	Black liquor gasification with calcium looping for carbon-negative pulp and paper industry. <i>International Journal of Greenhouse Gas Control</i> , 2021, 110, 103436.	2.3	4
12	Kinetic study and modeling on the regeneration of Li ₄ SiO ₄ -based sorbents for high-temperature CO ₂ capture. <i>Fuel Processing Technology</i> , 2021, 222, 106976.	3.7	7
13	Efficient-and-stable CH ₄ reforming with integrated CO ₂ capture and utilization using Li ₄ SiO ₄ sorbent. <i>Separation and Purification Technology</i> , 2021, 277, 119476.	3.9	42
14	Linking renewables and fossil fuels with carbon capture via energy storage for a sustainable energy future. <i>Frontiers of Chemical Science and Engineering</i> , 2020, 14, 453-459.	2.3	17
15	Integrating biomass into energy supply chain networks. <i>Journal of Cleaner Production</i> , 2020, 248, 119246.	4.6	23
16	Techno-economic evaluation of near-zero CO ₂ emission gas-fired power generation technologies: A review. <i>Journal of Natural Gas Science and Engineering</i> , 2020, 74, 103095.	2.1	43
17	Efficient decomposition strategy for scheduling of multistage production system and combined heat and power. <i>Computers and Chemical Engineering</i> , 2020, 133, 106634.	2.0	1
18	Techno-economic assessment of coal- or biomass-fired oxy-combustion power plants with supercritical carbon dioxide cycle. <i>Energy Conversion and Management</i> , 2020, 221, 113143.	4.4	61

#	ARTICLE	IF	CITATIONS
19	Supercritical CO ₂ cycle for coal-fired power plant based on calcium looping combustion. Thermal Science and Engineering Progress, 2020, 20, 100723.	1.3	8
20	Advanced power cycles for coal-fired power plants based on calcium looping combustion: A techno-economic feasibility assessment. Applied Energy, 2020, 269, 114954.	5.1	23
21	Integration of solid-oxide fuel cells and absorption refrigeration for efficient combined cooling, heat and power production. Clean Energy, 2020, 4, 328-348.	1.5	4
22	Effect of Seawater, Aluminate Cement, and Alumina-Rich Spinel on Pelletized CaO-Based Sorbents for Calcium Looping. Industrial & Engineering Chemistry Research, 2019, 58, 11910-11919.	1.8	8
23	Gas-fired chemical looping combustion with supercritical CO ₂ cycle. Applied Energy, 2019, 249, 237-244.	5.1	23
24	Staged oxy-fuel natural gas combined cycle. Applied Thermal Engineering, 2019, 153, 761-767.	3.0	10
25	Techno-economic feasibility assessment of calcium looping combustion using commercial technology appraisal tools. Journal of Cleaner Production, 2019, 219, 540-551.	4.6	54
26	Thermodynamic models applied to CO ₂ absorption modelling. Reviews in Chemical Engineering, 2019, .	2.3	5
27	Techno-economic feasibility of power to gas "oxy-fuel boiler hybrid system under uncertainty. International Journal of Hydrogen Energy, 2019, 44, 9505-9516.	3.8	17
28	Techno-economic evaluation of the 2-amino-2-methyl-1-propanol (AMP) process for CO ₂ capture from natural gas combined cycle power plant. International Journal of Greenhouse Gas Control, 2018, 70, 45-56.	2.3	31
29	Techno-economic feasibility assessment of CO ₂ capture from coal-fired power plants using molecularly imprinted polymer. Fuel, 2018, 214, 512-520.	3.4	26
30	Modelling of sorption-enhanced steam methane reforming in a fixed bed reactor network integrated with fuel cell. Applied Energy, 2018, 210, 1-15.	5.1	46
31	Nitrogen-rich hyper-crosslinked polymers for low-pressure CO ₂ capture. Chemical Engineering Journal, 2018, 334, 2004-2013.	6.6	53
32	Combined heat and power generation with lime production for direct air capture. Energy Conversion and Management, 2018, 160, 455-466.	4.4	33
33	A systematic review of key challenges of CO ₂ transport via pipelines. Renewable and Sustainable Energy Reviews, 2018, 81, 2563-2583.	8.2	100
34	Technical and economic feasibility evaluation of calcium looping with no CO ₂ recirculation. Chemical Engineering Journal, 2018, 335, 763-773.	6.6	32
35	From post-combustion carbon capture to sorption-enhanced hydrogen production: A state-of-the-art review of carbonate looping process feasibility. Energy Conversion and Management, 2018, 177, 428-452.	4.4	59
36	Feasibility of CaO/CuO/NiO sorption-enhanced steam methane reforming integrated with solid-oxide fuel cell for near-zero-CO ₂ emissions cogeneration system. Applied Energy, 2018, 230, 241-256.	5.1	24

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37	Packed bed sorption enhanced methane reforming on CaO/CuO/Al ₂ O ₃ (NiO) catalyst. Computer Aided Chemical Engineering, 2018, 43, 1389-1394.	0.3	1
38	Techno-economic analysis of oxy-combustion coal-fired power plant with cryogenic oxygen storage. Applied Energy, 2017, 191, 193-203.	5.1	66
39	Calcium looping combustion for high-efficiency low-emission power generation. Journal of Cleaner Production, 2017, 161, 245-255.	4.6	35
40	High-efficiency negative-carbon emission power generation from integrated solid-oxide fuel cell and calciner. Applied Energy, 2017, 205, 1189-1201.	5.1	37
41	Economic feasibility of calcium looping under uncertainty. Applied Energy, 2017, 208, 691-702.	5.1	39
42	Techno-economic analysis of sorption-enhanced steam methane reforming in a fixed bed reactor network integrated with fuel cell. Journal of Power Sources, 2017, 364, 41-51.	4.0	49
43	Evaluation of a calcium looping CO ₂ capture plant retrofit to a coal-fired power plant. Computer Aided Chemical Engineering, 2016, 38, 2115-2120.	0.3	1
44	Comparison of probabilistic performance of calcium looping and chemical solvent scrubbing retrofits for CO ₂ capture from coal-fired power plant. Applied Energy, 2016, 172, 323-336.	5.1	34
45	An experimental investigation of the combustion performance of human faeces. Fuel, 2016, 184, 780-791.	3.4	53
46	Conceptual energy and water recovery system for self-sustained nano membrane toilet. Energy Conversion and Management, 2016, 126, 352-361.	4.4	29
47	Calcium looping with supercritical CO ₂ cycle for decarbonisation of coal-fired power plant. Energy, 2016, 102, 343-353.	4.5	64
48	Calcium looping with inherent energy storage for decarbonisation of coal-fired power plant. Energy and Environmental Science, 2016, 9, 971-983.	15.6	77
49	Process modelling and techno-economic analysis of natural gas combined cycle integrated with calcium looping. Thermal Science, 2016, 20, 59-67.	0.5	14
50	Efficiency improvements for the coal-fired power plant retrofit with CO ₂ capture plant using chilled ammonia process. Applied Energy, 2015, 151, 258-272.	5.1	69
51	A review of developments in pilot-plant testing and modelling of calcium looping process for CO ₂ capture from power generation systems. Energy and Environmental Science, 2015, 8, 2199-2249.	15.6	254
52	Rate-based model development, validation and analysis of chilled ammonia process as an alternative CO ₂ capture technology for coal-fired power plants. International Journal of Greenhouse Gas Control, 2015, 34, 52-62.	2.3	46
53	Evaluation and Modeling of Part-Load Performance of Coal-Fired Power Plant with Postcombustion CO ₂ Capture. Energy & Fuels, 2015, 29, 3833-3844.	2.5	28
54	Investigation of Alternative Strategies for Integrating Post-combustion CO ₂ Capture to a Natural Gas Combined Cycle Power Plant. Energy & Fuels, 2015, 29, 4624-4633.	2.5	11

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55	Modelling and comparison of calcium looping and chemical solvent scrubbing retrofits for CO ₂ capture from coal-fired power plant. <i>International Journal of Greenhouse Gas Control</i> , 2015, 42, 226-236.	2.3	53
56	Probabilistic performance assessment of a coal-fired power plant. <i>Applied Energy</i> , 2015, 139, 350-364.	5.1	33
57	Rate-based Modelling of Chilled Ammonia Process (CAP) for CO ₂ Capture. <i>Computer Aided Chemical Engineering</i> , 2014, , 181-186.	0.3	0
58	Heat integration and exergy analysis for a supercritical high-ash coal-fired power plant integrated with a post-combustion carbon capture process. <i>Fuel</i> , 2014, 134, 126-139.	3.4	68
59	Sorption-enhanced gasification of municipal solid waste for hydrogen production: a comparative techno-economic analysis using limestone, dolomite and doped limestone. <i>Biomass Conversion and Biorefinery</i> , 0, , .	2.9	3