

Cçlin Cristian CormoÅ

List of Publications by Year in descending order

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112
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2793
citing authors

#	ARTICLE	IF	CITATIONS
1	Environmental evaluation of hydrogen production employing innovative chemical looping technologies – A Romanian case study. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 12112-12128.	3.8	6
2	Integration of membrane technology for decarbonization of gasification power plants: A techno-economic and environmental investigation. <i>Applied Thermal Engineering</i> , 2022, 205, 118078.	3.0	9
3	Techno-economic assessment of decarbonized biogas catalytic reforming for flexible hydrogen and power production. <i>Applied Thermal Engineering</i> , 2022, 207, 118218.	3.0	7
4	Decarbonization options for cement production process: A techno-economic and environmental evaluation. <i>Fuel</i> , 2022, 320, 123907.	3.4	19
5	Negative CO ₂ emissions in biomass gasification process with hybrid amine-deep eutectic solvents. <i>Computer Aided Chemical Engineering</i> , 2021, , 1665-1670.	0.3	2
6	Techno-economic Assessment of Load Following Operation for Super-critical Power Plants Equipped with Carbon Capture Feature. <i>Computer Aided Chemical Engineering</i> , 2021, 50, 1479-1484.	0.3	0
7	CO ₂ Utilization Technologies: A Techno-Economic Analysis for Synthetic Natural Gas Production. <i>Energies</i> , 2021, 14, 1258.	1.6	16
8	Techno-economic and environmental implications of decarbonization process applied for Romanian fossil-based power generation sector. <i>Energy</i> , 2021, 220, 119734.	4.5	22
9	Process simulation coupled with LCA for the evaluation of liquid - liquid extraction processes of phenol from aqueous streams. <i>Journal of Water Process Engineering</i> , 2021, 41, 102077.	2.6	13
10	Techno-economical evaluations of decarbonized hydrogen production based on direct biogas conversion using thermo-chemical looping cycles. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 23149-23163.	3.8	17
11	Assessment of Hybrid Solvent – Membrane Configurations for Post-Combustion CO ₂ Capture for Super-Critical Power Plants. <i>Energies</i> , 2021, 14, 5017.	1.6	10
12	Techno-economic assessment of calcium and magnesium-based sorbents for post-combustion CO ₂ capture applied in fossil-fueled power plants. <i>Fuel</i> , 2021, 298, 120794.	3.4	17
13	Techno-Economic Assessment of IGCC Power Plants Using Gas Switching Technology to Minimize the Energy Penalty of CO ₂ Capture. <i>Clean Technologies</i> , 2021, 3, 594-617.	1.9	5
14	Fuel Reactor CFD Multiscale Modelling in Syngas-Based Chemical Looping Combustion with Ilmenite. <i>Energies</i> , 2021, 14, 6059.	1.6	4
15	Techno-economic and environmental assessment of flexible operation for decarbonized super-critical power plants using reactive gas – liquid absorption. <i>Applied Thermal Engineering</i> , 2021, 197, 117354.	3.0	4
16	Experimental data supported techno-economic assessment of the oxidative dehydrogenation of ethane through chemical looping with oxygen uncoupling. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 149, 111403.	8.2	13
17	Application of Carbonate Looping Cycle as an Energy-efficient Decarbonization Process of Key Fossil-intensive Industrial Applications. , 2021, , .		0
18	Energy and cost efficient manganese chemical looping air separation cycle for decarbonized power generation based on oxy-fuel combustion and gasification. <i>Energy</i> , 2020, 191, 116579.	4.5	33

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19	Assessment of Innovative Carbon Capture Technologies Applied for Flexible Energy Vectors Poly-generation. <i>Computer Aided Chemical Engineering</i> , 2020, , 1369-1374.	0.3	0
20	Techno-economic implications of flexible operation for super-critical power plants equipped with calcium looping cycle as a thermo-chemical energy storage system. <i>Fuel</i> , 2020, 280, 118293.	3.4	22
21	Evaluation of techno-economic performance for decarbonized hydrogen and power generation based on glycerol thermo-chemical looping cycles. <i>Applied Thermal Engineering</i> , 2020, 179, 115728.	3.0	16
22	Environmental evaluation of european ammonia production considering various hydrogen supply chains. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 130, 109964.	8.2	77
23	Techno-Economic and Environmental Evaluations of Decarbonized Fossil-Intensive Industrial Processes by Reactive Absorption & Adsorption CO2 Capture Systems. <i>Energies</i> , 2020, 13, 1268.	1.6	30
24	Assessment of main energy integration elements for decarbonized gasification plants based on thermo-chemical looping cycles. <i>Journal of Cleaner Production</i> , 2020, 259, 120834.	4.6	13
25	Assessment of flexible carbon capture and utilization options applied to gasification plants. <i>Studia Universitatis Babeş-Bolyai Chemia</i> , 2020, 65, 21-34.	0.1	1
26	Techno-economic and environmental assessment of hydrogen production based on natural gas steam reforming process. <i>Studia Universitatis Babeş-Bolyai Chemia</i> , 2020, 65, 7-19.	0.1	0
27	Life Cycle Assessment of SEWGS Technology Applied to Integrated Steel Plants. <i>Sustainability</i> , 2019, 11, 1825.	1.6	11
28	Techno-economic assessment of flexible decarbonized hydrogen and power co-production based on natural gas dry reforming. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 31712-31723.	3.8	14
29	Gas switching reforming for flexible power and hydrogen production to balance variable renewables. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 110, 207-219.	8.2	39
30	Techno-economic assessment of hydrogen production processes based on various natural gas chemical looping systems with carbon capture. <i>Energy</i> , 2019, 181, 331-344.	4.5	56
31	Exergoeconomic Analysis for a Flexible Dry Reforming Power Plant with Carbon Capture for Improved Energy Efficiency. <i>Computer Aided Chemical Engineering</i> , 2019, 46, 1681-1686.	0.3	3
32	Assessing the environmental impact of an integrated steel mill with post-combustion CO2 capture and storage using the LCA methodology. <i>Journal of Cleaner Production</i> , 2019, 211, 1015-1025.	4.6	79
33	Techno-economic assessment of combined hydrogen & power co-generation with carbon capture: The case of coal gasification. <i>Applied Thermal Engineering</i> , 2019, 147, 29-39.	3.0	42
34	CO2 capture from syngas generated by a biomass gasification power plant with chemical absorption process. <i>Energy</i> , 2018, 149, 925-936.	4.5	43
35	Assessment of copper-based chemical looping air separation system for energy efficiency improvements of oxy-combustion and gasification power plants. <i>Applied Thermal Engineering</i> , 2018, 130, 120-126.	3.0	15
36	Improving methanol synthesis from carbon-free H2 and captured CO2: A techno-economic and environmental evaluation. <i>Journal of CO2 Utilization</i> , 2018, 24, 555-563.	3.3	101

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37	Carbon capture and utilisation technologies applied to energy conversion systems and other energy-intensive industrial applications. <i>Fuel</i> , 2018, 211, 883-890.	3.4	48
38	STEPWISE Project: Sorption-Enhanced Water-Gas Shift Technology to Reduce Carbon Footprint in the Iron and Steel Industry. <i>Johnson Matthey Technology Review</i> , 2018, 62, 395-402.	0.5	13
39	Techno-Economic Evaluations of Copper-Based Chemical Looping Air Separation System for Oxy-Combustion and Gasification Power Plants with Carbon Capture. <i>Energies</i> , 2018, 11, 3095.	1.6	16
40	Flexible Hydrogen and Power Co-generation based on Dry Methane Reforming with Carbon Capture. <i>Computer Aided Chemical Engineering</i> , 2018, 43, 1281-1286.	0.3	5
41	Assessing Energy and CO ₂ Emission Reduction from Ammonia Production by Chemical Looping as Innovative Carbon Capture Technology. <i>Computer Aided Chemical Engineering</i> , 2018, 43, 1269-1274.	0.3	3
42	Energy efficiency improvements of post-combustion CO ₂ capture based on reactive gas-liquid absorption applied for super-critical circulating fluidized bed combustion (CFBC) power plants. <i>Clean Technologies and Environmental Policy</i> , 2018, 20, 1311-1321.	2.1	10
43	Life Cycle Assessment for supercritical pulverized coal power plants with post-combustion carbon capture and storage. <i>Journal of Cleaner Production</i> , 2017, 157, 10-21.	4.6	114
44	Environmental assessment of IGCC power plants with pre-combustion CO ₂ capture by chemical & calcium looping methods. <i>Journal of Cleaner Production</i> , 2017, 158, 233-244.	4.6	73
45	Reducing the carbon footprint of cement industry by post-combustion CO ₂ capture: Techno-economic and environmental assessment of a CCS project in Romania. <i>Chemical Engineering Research and Design</i> , 2017, 123, 230-239.	2.7	49
46	Chemical Looping with Oxygen Uncoupling (CLOU) concepts for high energy efficient power generation with near total fuel decarbonisation. <i>Applied Thermal Engineering</i> , 2017, 112, 924-931.	3.0	23
47	Techno-economic and environmental performances of glycerol reforming for hydrogen and power production with low carbon dioxide emissions. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 7798-7810.	3.8	23
48	Cost Effective CO ₂ Reduction in the Iron & Steel Industry by Means of the SEWGS Technology: STEPWISE Project. <i>Energy Procedia</i> , 2017, 114, 6256-6265.	1.8	22
49	Techno-economic evaluations of post-combustion CO ₂ capture from sub- and super-critical circulated fluidised bed combustion (CFBC) power plants. <i>Applied Thermal Engineering</i> , 2017, 127, 106-115.	3.0	40
50	Assessment of coal and sawdust co-firing power generation under oxy-combustion conditions with carbon capture and storage. <i>Journal of Cleaner Production</i> , 2017, 142, 3527-3535.	4.6	25
51	Assessing the CO ₂ Emissions Reduction from Cement Industry by Carbon Capture Technologies: Conceptual Design, Process Integration and Techno-economic and Environmental Analysis. <i>Computer Aided Chemical Engineering</i> , 2017, 40, 2593-2598.	0.3	1
52	Evaluation of hydrogen production from catalytic reforming of liquefied petroleum gas with carbon capture and storage. <i>Studia Universitatis Babeş-Bolyai Chemia</i> , 2017, 62, 243-252.	0.1	0
53	Process Design and Integration of Various Carbon Capture Approaches into the Energy Sector and Other Energy-intensive Industrial Applications. <i>Computer Aided Chemical Engineering</i> , 2016, 38, 265-270.	0.3	3
54	Evaluation of reactive absorption and adsorption systems for post-combustion CO ₂ capture applied to iron and steel industry. <i>Applied Thermal Engineering</i> , 2016, 105, 56-64.	3.0	46

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55	Life Cycle Analysis applied to acrylic acid production process with different fuels for steam generation. <i>Journal of Cleaner Production</i> , 2016, 133, 294-303.	4.6	20
56	Oxy-combustion of coal, lignite and biomass: A techno-economic analysis for a large scale Carbon Capture and Storage (CCS) project in Romania. <i>Fuel</i> , 2016, 169, 50-57.	3.4	80
57	Assessment of chemical absorption/adsorption for post-combustion CO ₂ capture from Natural Gas Combined Cycle (NGCC) power plants. <i>Applied Thermal Engineering</i> , 2015, 82, 120-128.	3.0	56
58	Technico-economic assessment of coal and sawdust co-firing power generation with CO ₂ capture. <i>Journal of Cleaner Production</i> , 2015, 103, 140-148.	4.6	31
59	Evaluation of energy efficient low carbon hydrogen production concepts based on glycerol residues from biodiesel production. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 7017-7027.	3.8	16
60	Biomass direct chemical looping for hydrogen and power co-production: Process configuration, simulation, thermal integration and techno-economic assessment. <i>Fuel Processing Technology</i> , 2015, 137, 16-23.	3.7	57
61	Multi-fuel multi-product operation of IGCC power plants with carbon capture and storage (CCS). <i>Applied Thermal Engineering</i> , 2015, 74, 20-27.	3.0	61
62	Waste reduction algorithm applied for environmental impact assessment of coal gasification with carbon capture and storage. <i>Journal of Cleaner Production</i> , 2015, 104, 220-235.	4.6	29
63	Evaluation of Energy Integration Aspects for Advanced Chemical Looping Systems Applied for Energy Vectors Poly-generation. <i>Computer Aided Chemical Engineering</i> , 2015, 37, 2237-2242.	0.3	3
64	Life Cycle Assessment of Natural Gas-based Chemical Looping for Hydrogen Production. <i>Energy Procedia</i> , 2014, 63, 7408-7420.	1.8	23
65	Economic evaluations of coal-based combustion and gasification power plants with post-combustion CO ₂ capture using calcium looping cycle. <i>Energy</i> , 2014, 78, 665-673.	4.5	94
66	Thermodynamic Study of Hydrogen Production via Bioglycerol Steam Reforming. <i>Computer Aided Chemical Engineering</i> , 2014, 33, 1735-1740.	0.3	4
67	Assessment of chemical looping-based conceptual designs for high efficient hydrogen and power co-generation applied to gasification processes. <i>Chemical Engineering Research and Design</i> , 2014, 92, 741-751.	2.7	25
68	Evaluation of Calcium Looping as Carbon Capture Option for Combustion and Gasification Power Plants. <i>Energy Procedia</i> , 2014, 51, 154-160.	1.8	10
69	Assessment of Hydrogen Production Systems based on Natural Gas Conversion with Carbon Capture and Storage. <i>Computer Aided Chemical Engineering</i> , 2014, 33, 1081-1086.	0.3	18
70	Techno-economic and environmental evaluations of large scale gasification-based CCS project in Romania. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 13-27.	3.8	27
71	Comparative life cycle analysis for gasification-based hydrogen production systems. <i>Journal of Renewable and Sustainable Energy</i> , 2014, 6, .	0.8	16
72	Investigation of hydrogen and power co-generation based on direct coal chemical looping systems. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 2067-2077.	3.8	45

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73	Renewable hydrogen production concepts from bioethanol reforming with carbon capture. International Journal of Hydrogen Energy, 2014, 39, 5597-5606.	3.8	25
74	Economic implications of pre- and post-combustion calcium looping configurations applied to gasification power plants. International Journal of Hydrogen Energy, 2014, 39, 10507-10516.	3.8	34
75	Assessment of flexible energy vectors poly-generation based on coal and biomass/solid wastes co-gasification with carbon capture. International Journal of Hydrogen Energy, 2013, 38, 7855-7866.	3.8	34
76	Assessment of the consumption of water and construction materials in state-of-the-art fossil fuel power generation technologies involving CO2 capture. Energy, 2013, 51, 37-49.	4.5	52
77	Assessment of calcium-based chemical looping options for gasification power plants. International Journal of Hydrogen Energy, 2013, 38, 2306-2317.	3.8	37
78	Techno-economical assessment of coal and biomass gasification-based hydrogen production supply chain system. Chemical Engineering Research and Design, 2013, 91, 1527-1541.	2.7	56
79	Conceptual design of hydrogen production process from bioethanol reforming. Computer Aided Chemical Engineering, 2013, , 19-24.	0.3	3
80	Thermodynamic evaluation of hydrogen production via bioethanol steam reforming. AIP Conference Proceedings, 2013, , .	0.3	4
81	Evaluation of chemical looping systems as carbon capture option to be applied to gasification processes. Computer Aided Chemical Engineering, 2013, 32, 199-204.	0.3	1
82	TECHNO-ECONOMICAL EVALUATION OF POST- AND PRE- COMBUSTION CARBON DIOXIDE CAPTURE METHODS APPLIED FOR AN IGCC POWER GENERATION PLANT. Environmental Engineering and Management Journal, 2013, 12, 2191-2201.	0.2	3
83	Pre-combustion carbon dioxide capture by gasâ€“liquid absorption for Integrated Gasification Combined Cycle power plants. International Journal of Greenhouse Gas Control, 2012, 7, 1-11.	2.3	175
84	Evaluation of syngas-based chemical looping applications for hydrogen and power co-generation with CCS. International Journal of Hydrogen Energy, 2012, 37, 13371-13386.	3.8	45
85	Hydrogen and power co-generation based on coal and biomass/solid wastes co-gasification with carbon capture and storage. International Journal of Hydrogen Energy, 2012, 37, 5637-5648.	3.8	72
86	Integrated assessment of IGCC power generation technology with carbon capture and storage (CCS). Energy, 2012, 42, 434-445.	4.5	220
87	Integrated assessment of carbon capture and storage technologies in coal-based power generation using CAPE tools. Computer Aided Chemical Engineering, 2012, , 56-60.	0.3	4
88	Multiproduct, multiechelon supply chain analysis under demand uncertainty and machine failure risk. Computer Aided Chemical Engineering, 2012, , 462-466.	0.3	0
89	Multicriterial analysis of post-combustion carbon dioxide capture using alkanolamines. International Journal of Greenhouse Gas Control, 2011, 5, 676-685.	2.3	50
90	Design of Integrated Gasification Combined Cycle plant with Carbon Capture and Storage based on co-gasification of coal and biomass. Computer Aided Chemical Engineering, 2011, 29, 1904-1908.	0.3	5

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91	Techno-economical and environmental evaluations of IGCC power generation process with carbon capture and storage (CCS). Computer Aided Chemical Engineering, 2011, , 1678-1682.	0.3	12
92	Materials challenges and gasifier choices in IGCC processes for clean and efficient energy conversion. Materials Research Innovations, 2011, 15, 428-446.	1.0	3
93	Technical evaluations of carbon capture options for power generation from coal and biomass based on integrated gasification combined cycle scheme. Energy Procedia, 2011, 4, 1861-1868.	1.8	13
94	Evaluation of power generation schemes based on hydrogen-fuelled combined cycle with carbon capture and storage (CCS). International Journal of Hydrogen Energy, 2011, 36, 3726-3738.	3.8	66
95	Hydrogen production from fossil fuels with carbon capture and storage based on chemical looping systems. International Journal of Hydrogen Energy, 2011, 36, 5960-5971.	3.8	76
96	Use of lower grade coals in IGCC plants with carbon capture for the co-production of hydrogen and electricity. International Journal of Hydrogen Energy, 2010, 35, 556-567.	3.8	39
97	Evaluation of iron based chemical looping for hydrogen and electricity co-production by gasification process with carbon capture and storage. International Journal of Hydrogen Energy, 2010, 35, 2278-2289.	3.8	67
98	Evaluation of energy integration aspects for IGCC-based hydrogen and electricity co-production with carbon capture and storage. International Journal of Hydrogen Energy, 2010, 35, 7485-7497.	3.8	113
99	Energy integration issues for hydrogen and electricity co-production based on gasification process with Carbon Capture and Storage (CCS). Computer Aided Chemical Engineering, 2010, , 1057-1062.	0.3	4
100	Mathematical modeling and simulation of gasification processes with Carbon Capture and Storage (CCS) for energy vectors poly-generation. Computer Aided Chemical Engineering, 2010, 28, 697-702.	0.3	9
101	Heat and power integration for hydrogen-fuelled Combined Cycle Gas Turbine (CCGT). Computer Aided Chemical Engineering, 2009, , 1239-1244.	0.3	1
102	Power generation from coal and biomass based on integrated gasification combined cycle concept with pre-combustion and post-combustion carbon capture methods. Asia-Pacific Journal of Chemical Engineering, 2009, 4, 870-877.	0.8	22
103	Assessment of hydrogen and electricity co-production schemes based on gasification process with carbon capture and storage. International Journal of Hydrogen Energy, 2009, 34, 6065-6077.	3.8	81
104	The design of carbon capture IGCC-based plants with hydrogen co-production. Energy Procedia, 2009, 1, 591-598.	1.8	19
105	Evaluation of energy vectors poly-generation schemes based on solid fuel gasification processes with Carbon Capture and Storage (CCS). Computer Aided Chemical Engineering, 2009, , 1275-1280.	0.3	1
106	Innovative concepts for hydrogen production processes based on coal gasification with CO_2 capture. International Journal of Hydrogen Energy, 2008, 33, 1286-1294.	3.8	123
107	Water Management in Process Industries Incorporating Regeneration and Recycle through a Single Treatment Unit. Industrial & Engineering Chemistry Research, 2008, 47, 1111-1119.	1.8	58
108	Compressor Issues for Hydrogen Production and Transmission Through a Long Distance Pipeline Network. Revista De Chimie (discontinued), 2008, 59, .	0.2	0

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109	Making soda ash manufacture more sustainable. A modeling study using ASPEN Plus. Computer Aided Chemical Engineering, 2007, , 551-556.	0.3	3
110	Process water management with regeneration and recycle. Computer Aided Chemical Engineering, 2007, , 1343-1348.	0.3	0
111	Trade-off in emissions of acid gas pollutants and of carbon dioxide in fossil fuel power plants with carbon capture. Energy Policy, 2007, 35, 3991-3998.	4.2	68
112	Advanced process control of pantolactone synthesis using nonlinear model predictive control (NMPC). Computer Aided Chemical Engineering, 2005, 20, 1435-1440.	0.3	1