

Paolo Chiesa

List of Publications by Year in descending order

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Version: 2024-02-01

55
papers

2,991
citations

257101

24
h-index

161609

54
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57
all docs

57
docs citations

57
times ranked

2026
citing authors

#	ARTICLE	IF	CITATIONS
1	Co-production of hydrogen, electricity and CO from coal with commercially ready technology. Part A: Performance and emissions. International Journal of Hydrogen Energy, 2005, 30, 747-767.	3.8	329
2	Using Hydrogen as Gas Turbine Fuel. Journal of Engineering for Gas Turbines and Power, 2005, 127, 73-80.	0.5	325
3	Co-production of hydrogen, electricity and CO from coal with commercially ready technology. Part B: Economic analysis. International Journal of Hydrogen Energy, 2005, 30, 769-784.	3.8	269
4	Three-reactors chemical looping process for hydrogen production. International Journal of Hydrogen Energy, 2008, 33, 2233-2245.	3.8	205
5	A Thermodynamic Analysis of Different Options to Break 60% Electric Efficiency in Combined Cycle Power Plants. Journal of Engineering for Gas Turbines and Power, 2004, 126, 770-785.	0.5	146
6	CO2 capture from combined cycles integrated with Molten Carbonate Fuel Cells. International Journal of Greenhouse Gas Control, 2010, 4, 441-451.	2.3	139
7	Economic analysis of CO2 capture from natural gas combined cycles using Molten Carbonate Fuel Cells. Applied Energy, 2014, 130, 562-573.	5.1	115
8	CO2 cryogenic separation from combined cycles integrated with molten carbonate fuel cells. International Journal of Hydrogen Energy, 2011, 36, 10355-10365.	3.8	105
9	An Integrated Lumped Parameter-CFD approach for off-design ejector performance evaluation. Energy Conversion and Management, 2015, 105, 697-715.	4.4	92
10	Pre-combustion CO2 capture from natural gas power plants, with ATR and MDEA processes. International Journal of Greenhouse Gas Control, 2010, 4, 785-797.	2.3	90
11	Process design of a hydrogen production plant from natural gas with CO2 capture based on a novel Ca/Cu chemical loop. Applied Energy, 2014, 114, 192-208.	5.1	84
12	Application of an integrated lumped parameter-CFD approach to evaluate the ejector-driven anode recirculation in a PEM fuel cell system. Applied Thermal Engineering, 2017, 121, 628-651.	3.0	75
13	Integration of coal gasification and packed bed CLC for high efficiency and near-zero emission power generation. International Journal of Greenhouse Gas Control, 2014, 27, 28-41.	2.3	72
14	Comparison on process efficiency for CLC of syngas operated in packed bed and fluidized bed reactors. International Journal of Greenhouse Gas Control, 2014, 28, 65-78.	2.3	68
15	Investigation of heat management for CLC of syngas in packed bed reactors. Chemical Engineering Journal, 2013, 225, 174-191.	6.6	67
16	Predicting the ultimate potential of natural gas SOFC power cycles with CO2 capture – Part A: Methodology and reference cases. Journal of Power Sources, 2016, 324, 598-614.	4.0	62
17	CO2 Sequestration From IGCC Power Plants by Means of Metallic Membranes. Journal of Engineering for Gas Turbines and Power, 2007, 129, 123-134.	0.5	53
18	Reactor design and operation strategies for a large-scale packed-bed CLC power plant with coal syngas. International Journal of Greenhouse Gas Control, 2015, 36, 34-50.	2.3	53

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19	Using Hydrogen as Gas Turbine Fuel: Premixed Versus Diffusive Flame Combustors. Journal of Engineering for Gas Turbines and Power, 2014, 136, .	0.5	51
20	VLE properties of CO ₂ - Based binary systems containing N ₂ , O ₂ and Ar: Experimental measurements and modelling results with advanced cubic equations of state. Fluid Phase Equilibria, 2016, 428, 18-31.	1.4	47
21	Predicting the ultimate potential of natural gas SOFC power cycles with CO ₂ capture - Part B: Applications. Journal of Power Sources, 2016, 325, 194-208.	4.0	40
22	Energy analysis of two stage packed-bed chemical looping combustion configurations for integrated gasification combined cycles. Energy, 2015, 85, 489-502.	4.5	35
23	A novel system for the production of pure hydrogen from natural gas based on solid oxide fuel cell - solid oxide electrolyzer. International Journal of Hydrogen Energy, 2010, 35, 12680-12687.	3.8	32
24	Integration of a Gas Switching Combustion (GSC) system in integrated gasification combined cycles. International Journal of Greenhouse Gas Control, 2015, 42, 340-356.	2.3	26
25	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
26	Integration of chemical looping oxygen production and chemical looping combustion in integrated gasification combined cycles. Fuel, 2018, 220, 725-743.	3.4	24
27	Finding synergy between renewables and coal: Flexible power and hydrogen production from advanced IGCC plants with integrated CO ₂ capture. Energy Conversion and Management, 2021, 231, 113866.	4.4	23
28	Application of MCFCs for active CO ₂ capture within natural gas combined cycles. Energy Procedia, 2011, 4, 1235-1242.	1.8	21
29	Efficient low CO ₂ emissions power generation by mixed conducting membranes. Energy Procedia, 2013, 37, 905-913.	1.8	21
30	Experimental and analytical procedure for the characterization of innovative working fluids for power plants applications. Applied Thermal Engineering, 2020, 178, 115513.	3.0	21
31	Numerical optimization of steam cycles and steam generators designs for coal to FT plants. Chemical Engineering Research and Design, 2013, 91, 1467-1482.	2.7	20
32	Economic assessment of packed bed chemical looping combustion and suitable benchmarks. International Journal of Greenhouse Gas Control, 2017, 64, 223-233.	2.3	20
33	Optimization of a Gas Switching Combustion process through advanced heat management strategies. Applied Energy, 2017, 185, 1459-1470.	5.1	17
34	Modeling the Thermodynamics of Fluids Treated by CO ₂ Capture Processes with Peng-Robinson + Residual Helmholtz Energy-Based Mixing Rules. Industrial & Engineering Chemistry Research, 2017, 56, 2259-2276.	1.8	17
35	Integration of chemical looping combustion for cost-effective CO ₂ capture from state-of-the-art natural gas combined cycles. Energy Conversion and Management: X, 2020, 7, 100044.	0.9	17
36	Integration of Coal Gasification and Packed Bed CLC process for High Efficiency and Near-zero Emission Power Generation. Energy Procedia, 2013, 37, 662-670.	1.8	16

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37	Measurement and prediction of multi-property data of CO ₂ -N ₂ -O ₂ -CH ₄ mixtures with the Peng-Robinson residual Helmholtz energy-based model. <i>Fluid Phase Equilibria</i> , 2017, 437, 166-180.	1.4	16
38	Economic assessment of chemical looping oxygen production and chemical looping combustion in integrated gasification combined cycles. <i>International Journal of Greenhouse Gas Control</i> , 2018, 78, 354-363.	2.3	16
39	Thermal Stability Analysis of Perfluorohexane. <i>Energy Procedia</i> , 2015, 75, 1575-1582.	1.8	14
40	CO ₂ Separation From Combined Cycles Using Molten Carbonate Fuel Cells. <i>Journal of Fuel Cell Science and Technology</i> , 2012, 9, .	0.8	13
41	Vapour-Liquid Equilibrium Measurements of CO ₂ based Mixtures: Experimental Apparatus and Testing Procedures. <i>Energy Procedia</i> , 2014, 45, 1215-1224.	1.8	12
42	Dense Membranes for Oxygen and Hydrogen Separation (DEMOYS): Project Overview and First Results. <i>Energy Procedia</i> , 2013, 37, 1030-1038.	1.8	11
43	Boosting the IGCC process efficiency by optimizing the desulfurization step. <i>Applied Energy</i> , 2015, 157, 422-432.	5.1	11
44	Experimental characterisation of CO ₂ -C ₆ F ₆ mixture: Thermal stability and vapour liquid equilibrium test for its application in transcritical power cycle. <i>Applied Thermal Engineering</i> , 2022, 212, 118520.	3.0	11
45	Carbon-Free Hydrogen and Electricity From Coal: Options for Syngas Cooling in Systems Using a Hydrogen Separation Membrane Reactor. <i>Journal of Engineering for Gas Turbines and Power</i> , 2008, 130, .	0.5	10
46	Optimizing Thermodynamic Models: The Relevance of Molar Fraction Uncertainties. <i>Journal of Chemical & Engineering Data</i> , 2017, 62, 825-832.	1.0	9
47	High fidelity model of the oxygen flux across ion transport membrane reactor: Mechanism characterization using experimental data. <i>Energy</i> , 2016, 96, 127-141.	4.5	8
48	Sizing and operating units for the purification and compression of CO ₂ -based streams: The impact of thermodynamic model accuracy. <i>Journal of Supercritical Fluids</i> , 2018, 140, 336-347.	1.6	7
49	New experimental VLE data for the binary mixture of carbon dioxide-perfluorohexane (CO ₂ -C ₆ F ₁₄) from 273 K to 333 K. <i>Fluid Phase Equilibria</i> , 2019, 498, 94-103.	1.4	7
50	Oxygen Transport Membranes for Efficient Glass Melting. <i>Membranes</i> , 2020, 10, 442.	1.4	6
51	Simulation of Oxygen Transport Membranes for CPO Reactors in Small-scale Hydrogen or Syngas Production Applications. <i>Energy Procedia</i> , 2017, 142, 1589-1594.	1.8	5
52	Advanced technologies for syngas and hydrogen (H ₂) production from fossil-fuel feedstocks in power plants. , 2010, , 383-411.		4
53	COMPOSITE: A Concept for High Efficiency Power Production with Integrated CO ₂ Capture from Solid Fuels. <i>Energy Procedia</i> , 2017, 114, 539-550.	1.8	3
54	Integration of gas switching combustion and membrane reactors for exceeding 50% efficiency in flexible IGCC plants with near-zero CO ₂ emissions. <i>Energy Conversion and Management: X</i> , 2020, 7, 100050.	0.9	2

#	ARTICLE	IF	CITATIONS
55	A Code for the Preliminary Design of Cooled Supercritical CO2 Turbines and Application to the Allam Cycle. <i>Journal of Engineering for Gas Turbines and Power</i> , 2022, 144, .	0.5	2