Davide Bonalumi

List of Publications by Year
in descending order

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45 papers	1,216 citations	471509 17 h-index	377865 34 g-index
45 all docs	45 docs citations	45 times ranked	1186 citing authors

#	Article	IF	Citations
1	In Situ Monitoring and Modeling of the Solvent-Mediated Polymorphic Transformation ofl-Glutamic Acid. Crystal Growth and Design, 2006, 6, 881-891.	3.0	245
2	Life Cycle Assessment for supercritical pulverized coal power plants with post-combustion carbon capture and storage. Journal of Cleaner Production, 2017, 157, 10-21.	9.3	114
3	A parametric investigation of the Chilled Ammonia Process from energy and economic perspectives. Fuel, 2012, 101, 74-83.	6.4	74
4	Energy and exergy analyses for the carbon capture with the Chilled Ammonia Process (CAP). Energy Procedia, 2009, 1, 1059-1066.	1.8	69
5	Amine-based post-combustion CO2 capture in air-blown IGCC systems with cold and hot gas clean-up. Applied Energy, 2013, 110, 44-54.	10.1	65
6	CO2 mixtures as innovative working fluid in power cycles applied to solar plants. Techno-economic assessment. Solar Energy, 2019, 181, 530-544.	6.1	60
7	Comparison of two electrolyte models for the carbon capture with aqueous ammonia. International Journal of Greenhouse Gas Control, 2012, 8, 61-72.	4.6	53
8	Energetic evaluation of a power plant integrated with a piperazine-based CO 2 capture process. International Journal of Greenhouse Gas Control, 2014, 28, 343-355.	4.6	51
9	A comprehensive modeling of the hybrid temperature electric swing adsorption process for CO2 capture. International Journal of Greenhouse Gas Control, 2018, 74, 155-173.	4.6	45
10	Effect of a partial thermal decomposition of the working fluid on the performances of ORC power plants. Energy, 2017, 133, 1013-1026.	8.8	37
11	Investigations of an air-blown integrated gasification combined cycle fired with high-sulphur coal with post-combustion carbon capture by aqueous ammonia. Energy, 2016, 117, 439-449.	8.8	34
12	Titanium tetrachloride as novel working fluid for high temperature Rankine Cycles: Thermodynamic analysis and experimental assessment of the thermal stability. Applied Thermal Engineering, 2016, 107, 21-27.	6.0	30
13	A Layout for the Carbon Capture with Aqueous Ammonia without Salt Precipitation. Energy Procedia, 2016, 86, 134-143.	1.8	27
14	Rate-based simulation and techno-economic analysis of coal-fired power plants with aqueous ammonia carbon capture. Energy Conversion and Management, 2019, 199, 111966.	9.2	25
15	CO2-TiCl4 working fluid for high-temperature heat source power cycles and solar application. Renewable Energy, 2020, 147, 2842-2854.	8.9	22
16	Alternative Layouts for the Carbon Capture with the Chilled Ammonia Process. Energy Procedia, 2013, 37, 2076-2083.	1.8	21
17	Thermodynamic and kinetic properties of NH3-K2CO3-CO2-H2O system for carbon capture applications. International Journal of Greenhouse Gas Control, 2019, 85, 121-131.	4.6	21
18	Modeling of ultra super critical power plants integrated with the chilled ammonia process. Energy Procedia, 2011, 4, 1721-1728.	1.8	18

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19	Techno-economic Comparison of Combined Cycle Gas Turbines with Advanced Membrane Configuration and Monoethanolamine Solvent at Part Load Conditions. Energy & Fuels, 2018, 32, 625-645.	5.1	17
20	A Study of CO2 Capture in Advanced IGCC Systems by Ammonia Scrubbing. Energy Procedia, 2014, 45, 663-670.	1.8	16
21	Techno-economic assessment of the FReSMe technology for CO2 emissions mitigation and methanol production from steel plants. Journal of CO2 Utilization, 2022, 56, 101852.	6.8	16
22	Thermal stability of organic fluids for Organic Rankine Cycle systems. , 2017, , 121-151.		15
23	Concentrated Aqueous Piperazine as CO2 Capture Solvent: Detailed Evaluation of the Integration with a Power Plant. Energy Procedia, 2014, 63, 1218-1222.	1.8	12
24	Results from Process Modeling of the Mixed-salt Technology for CO2 Capture from Post-combustion-related Applications. Energy Procedia, 2017, 114, 771-780.	1.8	12
25	Thermodynamic Assessment of Cooled and Chilled Ammonia-based CO2 Capture in Air-Blown IGCC Plants. Energy Procedia, 2016, 86, 272-281.	1.8	10
26	Thermo-chemical engines: Unexploited high-potential energy converters. Energy Conversion and Management, 2021, 229, 113685.	9.2	10
27	Experimental study of the aqueous CO2-NH3 rate of reaction for temperatures from 15â€Â°C to 35â€Â°C, NH3 concentrations from 5% to 15% and CO2 loadings from 0.2 to 0.6. International Journal of Greenhouse Gas Control, 2018, 70, 117-127.	4.6	9
28	Zero Emission Geothermal Flash Power Plant. Energy Procedia, 2017, 126, 698-705.	1.8	8
29	The design of CO 2 -based working fluids for high-temperature heat source power cycles. Energy Procedia, 2017, 129, 947-954.	1.8	8
30	Preliminary Study of Pyrolysis and Gasification of Biomass and Thermosetting Resins for Energy Production. Energy Procedia, 2016, 101, 432-439.	1.8	7
31	Potential performance of environmental friendly application of ORC and Flash technology in geothermal power plants. Energy Procedia, 2017, 129, 621-628.	1.8	7
32	Parametric investigation of CO2 capture from industrial flue gases using aqueous mixtures of ammonia (NH3) and potassium carbonate (K2CO3). International Journal of Greenhouse Gas Control, 2022, 114, 103567.	4.6	7
33	Techno-economic investigations of supercritical CO2-based partial heating cycle as bottoming system of a small gas turbine. Energy, 2022, 252, 124066.	8.8	7
34	Simulation Comparison of PEMFC Micro-Cogeneration Units With Conventional and Innovative Fuel Processing. , 2010, , .		6
35	Performance Improvement of Cooled Ammonia-based CO2 Capture in Combined Cycles with Gasification of High-sulfur Coal. Energy Procedia, 2017, 114, 6440-6447.	1.8	6
36	Innovative Process Cycle with Zeolite (MS13X) for Post Combustion Adsorption. Energy Procedia, 2017, 114, 2211-2218.	1.8	6

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37	Rate-based Approaches for the Carbon Capture with Aqueous Ammonia Without Salt Precipitation. Energy Procedia, 2016, 101, 400-407.	1.8	5
38	Techno-economic performance of the 2-propanol/1-butanol zeotropic mixture and 2-propanol/water azeotropic mixture as a working fluid in Organic Rankine Cycles. Energy, 2022, 246, 123316.	8.8	5
39	Kinetic study of a Layout for the Carbon Capture with Aqueous Ammonia without Salt Precipitation. Energy Procedia, 2017, 114, 1352-1359.	1.8	4
40	Enhanced Geothermal System with captured CO2. Energy Procedia, 2018, 148, 744-750.	1.8	4
41	Considerations on CO2 and pollutants emissions of modern cars. AIP Conference Proceedings, 2019, , .	0.4	4
42	Isobaric Vaporâ€“Liquid Equilibrium Data for the Isopropanolâ€“Water System. Journal of Chemical & Engineering Data, 0, , .	1.9	2
43	Experimental data of the aqueous NH3 and CO2 absorption at temperatures from 15â€¯Â°C to 35â€¯Â°C, NH3 concentrations from 5% to 15% and CO2 loadings from 0.2 to 0.6 measured with the Wetted Wall Column. Data in Brief, 2018, 17, 1240-1244.	1.0	1
44	A case study of cascade supercritical CO2 power cycle for waste heat recovery from a small gas turbine. Energy Conversion and Management: X, 2022, 14, 100212.	1.6	1
45	Chemical Absorption by Aqueous Solution of Ammonia. , 0, , .		0