Gerhard Schmitz

List of Publications by Year
in descending order

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40	477	759055 12	752573 20
papers	citations	h-index	g-index

40	40	40	427
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Modelling and transient simulation of CO2-refrigeration systems with Modelica. International Journal of Refrigeration, 2004, 27, 42-52.	1.8	43
2	Implementation of model predictive control in a large-sized, low-energy office building. Building and Environment, 2021, 197, 107830.	3.0	38
3	Performance of a solar assisted air conditioning system at different locations. Solar Energy, 2013, 92, 69-83.	2.9	36
4	Experimental investigation of a ground-coupled desiccant assisted air conditioning system. Applied Energy, 2016, 181, 575-585.	5.1	35
5	Modeling and simulation of a desiccant assisted solar and geothermal air conditioning system. Energy, 2017, 141, 2321-2336.	4.5	28
6	Modeling and experimental validation of the desiccant wheel in a hybrid desiccant air conditioning system. Applied Thermal Engineering, 2013, 51, 1082-1091.	3.0	24
7	Dynamics of Postcombustion CO₂ Capture Plants: Modeling, Validation, and Case Study. Industrial & Engineering Chemistry Research, 2017, 56, 1810-1822.	1.8	23
8	Modeling and simulation of the start-up process of coal fired power plants with post-combustion CO2 capture. International Journal of Greenhouse Gas Control, 2019, 87, 44-57.	2.3	21
9	Dynamic Behavior of Coal-Fired Power Plants with Postcombustion CO₂ Capture. Industrial & Engineering Chemistry Research, 2016, 55, 12038-12045.	1.8	19
10	Experimental study on the accretion and release of ice in aviation jet fuel. Aerospace Science and Technology, 2018, 82-83, 294-303.	2.5	16
11	Impacts of occupancy on energy demand and thermal comfort for a large-sized administration building. Building and Environment, 2020, 182, 107027.	3.0	16
12	Dynamic analysis of the absorption/desorption loop of a carbon capture plant using an object-oriented approach. Chemical Engineering and Processing: Process Intensification, 2012, 52, 132-139.	1.8	15
13	Optimization of a composite latent heat storage (CLHS) with non-uniform heat fluxes using a genetic algorithm. International Journal of Heat and Mass Transfer, 2016, 101, 600-607.	2.5	13
14	Status of the TransiEnt Library: Transient Simulation of Coupled Energy Networks with High Share of Renewable Energy. , 2015, , .		13
15	Analysis of refrigerant pipe pressure drop of a CO2 air conditioning unit for vehicles. International Journal of Refrigeration, 2019, 106, 583-591.	1.8	12
16	Air conditioning system with enthalpy recovery for space heating and air humidification: An experimental and numerical investigation. Energy, 2020, 213, 118789.	4.5	12
17	Experimental analysis of regularly structured composite latent heat storages for temporary cooling of electronic components. Heat and Mass Transfer, 2013, 49, 1565-1575.	1.2	11
18	Performance assessment of regularly structured Composite Latent Heat Storages for temporary cooling of electronic components. International Journal of Refrigeration, 2012, 35, 1145-1155.	1.8	10

#	Article	IF	Citations
19	Experimental investigation of a ground-coupled air conditioning system with desiccant assisted enthalpy recovery during winter mode. Applied Thermal Engineering, 2019, 160, 114017.	3.0	10
20	Frequency response analysis for the determination of thermal conductivity and water transport in MOF adsorbent coatings for heat transformation. International Journal of Heat and Mass Transfer, 2021, 169, 120921.	2.5	10
21	Dynamic simulation of different transport options of renewable hydrogen to a refinery in a coupled energy system approach. International Journal of Hydrogen Energy, 2018, 43, 19600-19614.	3.8	8
22	Desiccant-Assisted Air Conditioning System Relying on Solar and Geothermal Energy during Summer and Winter. Energies, 2019, 12, 3175.	1.6	8
23	Status of ClaRaCCS: Modelling and Simulation of Coal-Fired Power Plants with CO2 Capture. , 2012, , .		7
24	Dynamic Simulation and Comparison of Different Configurations for a Coupled Energy System with 100 % Renewables. Energy Procedia, 2018, 155, 412-430.	1.8	6
25	Thermal Separation: An Approach for a Modelica Library for Absorption, Adsorption and Rectification. , 2009, , .		5
26	Engine-driven hybrid air-conditioning system. Frontiers of Energy and Power Engineering in China, 2009, 3, 109-116.	0.4	5
27	Dynamic Simulation and Investigation of the Startup Process of a Postcombustion-Capture Plant. Industrial & Engineering Chemistry Research, 2018, 57, 16751-16762.	1.8	5
28	A Novel Approach for the Determination of Sorption Equilibria and Sorption Enthalpy Used for MOF Aluminium Fumarate with Water. Energies, 2020, 13, 3003.	1.6	5
29	Integration of an adsorption chiller in an open-cycle desiccant-assisted air-conditioning system. Science and Technology for the Built Environment, 2015, 21, 375-383.	0.8	4
30	Notice of Retraction: Numerical investigation on the performance of spark ignition engine used for electricity production fuelled by natural gas/liquefied petroleum gas-biogas blends with Modelica. , 2010, , .		3
31	Interfacing Models for Thermal Separation Processes with Fluid Property Data from External Sources. , 2014, , .		3
32	Simulation of a Vehicle Refrigeration Cycle with Dymola/Modelica. , 2005, , .		2
33	A Unified Control Scheme for Coal-Fired Power Plants with Integrated Post Combustion CO2 Capture. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 284-289.	0.4	2
34	Experimental and numerical analysis of composite latent heat storage in cooling systems for power electronics. Heat and Mass Transfer, 2019, 55, 2949-2958.	1.2	2
35	Comparison of Conventional and Variable Borehole Heat Exchangers for Use in a Desiccant Assisted Air Conditioning System. Energies, 2021, 14, 926.	1.6	2
36	Optimizing the start-up process of post-combustion capture plants by varying the solvent flow rate. , 2017, , .		2

#	Article	IF	Citations
37	Variable Structure Modeling for Vehicle Refrigeration Applications. , 2012, , .		2
38	Investigation of the dynamic heat transfer coefficient of R-134a in a horizontal pipe. Science and Technology for the Built Environment, 2015, 21, 578-584.	0.8	1
39	Object-oriented modeling and simulation of a natural gas-fuelled spark ignition engine with Modelica. , 2010, , .		0
40	Experimental investigation of temporary electronics cooling with regularly structured composite latent heat storage. HVAC and R Research, 2013, 19, 814-822.	0.9	0