JosÃ© Joaquim da Costa

List of Publications by Year
in descending order

88 papers	2,619 citations	236925 25 h-index	197818 49 g-index
91 all docs	91 docs citations	91 times ranked	2198 citing authors

#	Article	IF	Citations
1	A new wind direction-driven heat convection model is needed in dynamic simulation: What, why, and how. Energy and Buildings, 2022, 256, 111716.	6.7	2
2	Barriers on Establishing Passive Strategies in Office Spaces: A Case Study in a Historic University Building. Sustainability, 2021, 13, 4563.	3.2	2
3	Daylighting simulation of a heritage building by comparing matrix methods and solar models. Solar Energy, 2021, 224, 685-696.	6.1	3
4	Advances in standalone and hybrid earth-air heat exchanger (EAHE) systems for buildings: A review. Energy and Buildings, 2021, 253, 111532.	6.7	33
5	Can movable PCM-filled TES units be used to improve the performance of PV panels? Overview and experimental case-study. Energy and Buildings, 2020, 210, 109743.	6.7	19
6	The contribution of ventilation on the energy performance of small residential buildings in the Mediterranean region. Energy, 2020, 191, 116577.	8.8	9
7	Effect of atomizer geometry on particle formation in dry-ice sprays. International Journal of Multiphase Flow, 2020, 130, 103358.	3.4	2
8	Assessment of an earth-air heat exchanger (EAHE) system for residential buildings in warm-summer Mediterranean climate. Sustainable Energy Technologies and Assessments, 2020, 38, 100649.	2.7	36
9	A Discussion of Mixed Integer Linear Programming Models of Thermostatic Loads in Demand Response. Trends in Mathematics, 2020, , 105-122.	0.1	8
10	Effect of non-zero mean stress bending-torsion fatigue on fracture surface parameters of 34CrNiMo6 steel notched bars. Production Engineering Archives, 2020, 26, 167-173.	2.4	11
11	On the stress state transition in notched cracked plates under tension loading. Material Design and Processing Communications, 2019, 1, e85.	0.9	0
12	Thermal transmittance effect on energy consumption of Mediterranean buildings with different thermal mass. Applied Energy, 2019, 252, 113437.	10.1	46
13	Performance-based design of multi-story buildings for a sustainable urban environment: A case study. Renewable and Sustainable Energy Reviews, 2019, 113, 109243.	16.4	23
14	Parametric study on the performance of an air curtain based on CFD simulations - New proposal for automatic operation. Journal of Wind Engineering and Industrial Aerodynamics, 2019, 193, 103951.	3.9	23
15	Effect of temperature on the thermal conductivity of a granite with high heat production from Central Portugal. Journal of Iberian Geology, 2019, 45, 147-161.	1.3	5
16	Prevention of Initial Depressive Disorders Among at-Risk Portuguese Adolescents. Behavior Therapy, 2019, 50, 743-754.	2.4	3
17	Mixed numericalâ€experimental method for generation of energyâ€life fatigue master curves. Material Design and Processing Communications, 2019, 1, e37.	0.9	2
18	Analysis of the air infiltration through the doorway of a refrigerated room using different approaches. Applied Thermal Engineering, 2019, 159, 113927.	6.0	5

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19	Thermal transmittance of lightweight steel framed walls: Experimental versus numerical and analytical approaches. Journal of Building Engineering, 2019, 25, 100776.	3.4	33
20	Numerical recipes for successfully modeling the phase transitions in thermal energy storage adsorption systems. Energy Storage, 2019, 1, e42.	4.3	1
21	The impact of thermal transmittance variation on building design in the Mediterranean region. Applied Energy, 2019, 239, 581-597.	10.1	24
22	Performance Analysis of a Solar DHW System with Adsorption Module Operating in Different World Locations. Applied Sciences (Switzerland), 2019, 9, 5480.	2.5	1
23	Fatigue Crack Growth in Maraging Steel Obtained by Selective Laser Melting. Applied Sciences (Switzerland), 2019, 9, 4412.	2.5	22
24	Elastic correction of fatigue crack growth laws. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 1052-1061.	3.4	4
25	Laboratory and in-situ non-destructive methods to evaluate the thermal transmittance and behavior of walls, windows, and construction elements with innovative materials: A review. Energy and Buildings, 2019, 182, 88-110.	6.7	80
26	The importance of long-term hygrothermal assessment of museum spaces: method and application in a permanent exhibition in a historical building. Conservar Patrimonio, 2019, 30, 91-105.	0.4	2
27	An integrated energy performance-driven generative design methodology to foster modular lightweight steel framed dwellings inÂhot climates. Energy for Sustainable Development, 2018, 44, 21-36.	4.5	32
28	Optimization of a thermal energy storage system provided with an adsorption module â€“ A GenOpt application in a TRNSYS/MATLAB model. Energy Conversion and Management, 2018, 162, 90-97.	9.2	9
29	Modelling and performance analysis of an earth-to-air heat exchanger in a pilot installation. Journal of Building Physics, 2018, 42, 259-287.	2.4	23
30	Thermal assessment of sublimation cooling with dry-ice sprays. International Journal of Heat and Mass Transfer, 2018, 118, 518-526.	4.8	19
31	The potential impact of low thermal transmittance construction on the European design guidelines of residential buildings. Energy and Buildings, 2018, 178, 379-390.	6.7	12
32	Energy efficiency and thermal performance of lightweight steel-framed (LSF) construction: A review. Renewable and Sustainable Energy Reviews, 2017, 78, 194-209.	16.4	92
33	Accuracy of simplified heating coil models based on manufacturer catalogue data. Thermal Science and Engineering Progress, 2017, 3, 10-23.	2.7	0
34	Simplified model of finned-tube heat exchangers based on the effectiveness method and calibrated with manufacturer and experimental data. Applied Thermal Engineering, 2017, 111, 340-352.	6.0	5
35	Assessment of the indoor environmental conditions of a baroque library in Portugal. Energy Procedia, 2017, 133, 257-267.	1.8	12
36	Modeling and parametric analysis of an adsorber unit for thermal energy storage. Energy, 2016, 102, 83-94.	8.8	16

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37	Indoor climate assessment: A case study at a business incubation centre. Sustainable Cities and Society, 2016, 26, 466-475.	10.4	3
38	Study of three-stage intermittent drying of pears considering shrinkage and variable diffusion coefficient. Journal of Food Engineering, 2016, 180, 77-86.	5.2	27
39	A thermal energy storage system provided with an adsorption module â€“ Dynamic modeling and viability study. Energy Conversion and Management, 2016, 126, 548-560.	9.2	18
40	Experimental evaluation of the heat transfer through small PCM-based thermal energy storage units for building applications. Energy and Buildings, 2016, 116, 18-34.	6.7	49
41	Simplified component model of heating and dry-cooling coils: Influence of altitude and of glycol concentration in the heat transfer fluid on the error prediction of the heat transfer rate. Journal of Building Engineering, 2016, 6, 39-53.	3.4	3
42	Influence of the design parameters on the overall performance of a solar adsorption refrigerator. Renewable Energy, 2016, 86, 238-250.	8.9	24
43	Increasing the efficiency of high temperature furnaces through a topping cycle cogenerationâ€”a case study. Energy Efficiency, 2015, 8, 85-95.	2.8	3
44	Experimental study of the heat transfer through a vertical stack of rectangular cavities filled with phase change materials. Applied Energy, 2015, 142, 192-205.	10.1	35
45	Development, calibration and validation of a mathematical model for the low-pressure-vaporization of the water in porous media. International Journal of Heat and Mass Transfer, 2014, 73, 574-585.	4.8	1
46	Experimental and mathematical study of the discontinuous drying kinetics of pears. Journal of Food Engineering, 2014, 134, 30-36.	5.2	29
47	Numerical evaluation of a phase change materialâ€“shutter using solar energy for winter nighttime indoor heating. Journal of Building Physics, 2014, 37, 367-394.	2.4	21
48	Multi-dimensional optimization of the incorporation of PCM-drywalls in lightweight steel-framed residential buildings in different climates. Energy and Buildings, 2014, 70, 411-421.	6.7	132
49	Correlations for the mass transfer coefficient in desiccant matrices when using linear driving force and pseudo-gas-side-controlled models. Energy, 2014, 75, 613-623.	8.8	6
50	Comparative assessment of the linear driving force and pseudo-gas-side-controlled models for the prediction of mass transfer in desiccant matrices. Energy, 2014, 75, 603-612.	8.8	8
51	Review and future trends of solar adsorption refrigeration systems. Renewable and Sustainable Energy Reviews, 2014, 39, 102-123.	16.4	121
52	Physical and experimental calibration of a mathematical model of the low-pressure-vaporization of free water. Journal of Food Engineering, 2014, 138, 23-34.	5.2	5
53	Low-pressure-vaporization of free water â€“ Characterization of the boiling regimes. International Journal of Thermal Sciences, 2014, 77, 19-26.	4.9	23
54	Influence of Altitude on the Behavior of Solid Desiccant Dehumidification System. , 2014, , 85-107.		3

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55	Experimental study of the low-pressure-vaporization of water in different porous media. International Journal of Heat and Mass Transfer, 2013, 65, 561-571.	4.8	10
56	A new approach to the effectiveness method for the simulation of desiccant wheels with variable inlet states and airflows rates. Applied Thermal Engineering, 2013, 58, 670-678.	6.0	28
57	Exponential correlations to predict the dependence of effectiveness parameters of a desiccant wheel on the airflow rates and on the rotation speed. Applied Thermal Engineering, 2013, 51, 442-450.	6.0	17
58	Review of passive PCM latent heat thermal energy storage systems towards buildingsâ€™ energy efficiency. Energy and Buildings, 2013, 59, 82-103.	6.7	785
59	A systematic indoor air quality audit approach for public buildings. Environmental Monitoring and Assessment, 2013, 185, 865-875.	2.7	17
60	Characterising the Differences between the Adsorption and Desorption Processes in a Desiccant Layer by Detailed Numerical Modelling. Defect and Diffusion Forum, 2012, 326-328, 690-695.	0.4	0
61	Interpolation procedures for the effectiveness method to account for the influence of the inlet airflow states on the desiccant wheels performance. Energy and Buildings, 2012, 55, 380-388.	6.7	9
62	A mathematical model describing the two stages of low-pressure-vaporization of free water. Journal of Food Engineering, 2012, 112, 274-281.	5.2	18
63	CFD modelling of aerodynamic sealing by vertical and horizontal air curtains. Energy and Buildings, 2012, 52, 153-160.	6.7	51
64	Study of the aerodynamic sealing of a cold store â€“ Experimental and numerical approaches. Energy and Buildings, 2012, 55, 779-789.	6.7	16
65	Effectiveness parameters for the prediction of the global performance of desiccant wheels â€“ An assessment based on experimental data. Renewable Energy, 2012, 38, 181-187.	8.9	38
66	Heat and Mass Transfer in Matrices of Hygroscopic Wheels. Advanced Structured Materials, 2012, , 245-263.	0.5	1
67	Uso da lidocaÃna tÃ³pica a 4% para terapia ocupacional em pacientes com sÃndrome dolorosa complexa regional: relato de casos. Revista Dor, 2012, 13, 291-294.	0.1	0
68	Parametric study of the cyclic behaviour of a hygroscopic matrix in a desiccant airflow system. Heat and Mass Transfer, 2011, 47, 1101-1112.	2.1	6
69	Indoor air quality audit implementation in a hotel building in Portugal. Building and Environment, 2011, 46, 1617-1623.	6.9	38
70	Numerical study of the influence of the atmospheric pressure on the heat and mass transfer rates of desiccant wheels. International Journal of Heat and Mass Transfer, 2011, 54, 1331-1339.	4.8	21
71	Influence of the atmospheric pressure on the mass transfer rate of desiccant wheels. International Journal of Refrigeration, 2011, 34, 707-718.	3.4	11
72	Validity of pseudo-gas-side-controlled models to predict the behaviour of desiccant matrices. International Journal of Thermal Sciences, 2009, 48, 2171-2178.	4.9	14

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73	On the validity of lumped capacitance approaches for the numerical prediction of heat and mass transfer in desiccant airflow systems. International Journal of Thermal Sciences, 2008, 47, 282-292.	4.9	32
74	Numerical Study of the Cyclic Behavior of a Desiccant Layer of a Hygroscopic Rotor. Numerical Heat Transfer; Part A: Applications, 2008, 53, 1037-1053.	2.1	11
75	Estudo comparativo entre uma e duas doses efetivas (DE95) de rocurÃ´nio para a intubaÃ§Ã£o traqueal. Revista Brasileira De Anestesiologia, 2008, 58, 202-209.	0.6	4
76	On the behaviour of hygroscopic wheels: Part I â€“ channel modelling. International Journal of Heat and Mass Transfer, 2007, 50, 4812-4822.	4.8	53
77	On the behaviour of hygroscopic wheels: Part II â€“ rotor performance. International Journal of Heat and Mass Transfer, 2007, 50, 4823-4832.	4.8	31
78	On the use of infrared thermography in studies with air curtain devices. Energy and Buildings, 2006, 38, 1194-1199.	6.7	18
79	Energy savings by aerodynamic sealing with a downward-blowing plane air curtainâ€”A numerical approach. Energy and Buildings, 2006, 38, 1182-1193.	6.7	69
80	Analysis of Simplifying Assumptions for the Numerical Modeling of the Heat and Mass Transfer in a Porous Desiccant Medium. Numerical Heat Transfer; Part A: Applications, 2006, 49, 851-872.	2.1	38
81	Experimental analysis of the use of wet porous media for thermal protection against high intensity heat fluxes. International Journal of Heat and Mass Transfer, 2004, 47, 11-19.	4.8	8
82	Turbulent airflow in a room with a two-jet heating-ventilation system â€” a numerical parametric study. Energy and Buildings, 2000, 32, 327-343.	6.7	20
83	Test of several versions for the kâ€“Îµ type turbulence modelling of internal mixed convection flows. International Journal of Heat and Mass Transfer, 1999, 42, 4391-4409.	4.8	74
84	On aerodynamic sealing for industrial applications. Journal of Wind Engineering and Industrial Aerodynamics, 1991, 37, 255-268.	3.9	12
85	On the Temperature Distribution Inside a Tree Under Fire Conditions. International Journal of Wildland Fire, 1991, 1, 87.	2.4	30
86	Effectiveness Parameters for the Heat and Mass Transfer in a Desiccant Wheel. Defect and Diffusion Forum, 0, 312-315, 205-210.	0.4	0
87	Impact of Advances on Computing and Communication Systems in Automotive Testing. , 0, , 703-718.		1
88	Application of dry-ice for transient spray cooling. , 0, , .		0