Francesco Goia

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3298888/publications.pdf

Version: 2024-02-01

71	2,230	257357	233338
papers	citations	24 h-index	45 g-index

74	74	74	1445
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Laboratory testbed and methods for flexible characterization of thermal and fluid dynamic behaviour of double skin facades. Building and Environment, 2022, 210, 108700.	3.0	12
2	Embedding intelligence to control adaptive building envelopes. , 2022, , 155-179.		3
3	Inverse design for advanced building envelope materials, systems and operation. , 2022, , 377-402.		1
4	Tracer gas techniques for airflow characterization in double skin facades. Building and Environment, 2022, 212, 108803.	3.0	10
5	Characterization of a naturally ventilated double-skin faÃ§ade through the design of experiments (DOE) methodology in a controlled environment. Energy and Buildings, 2022, 263, 112024.	3.1	6
6	Control of heat transfer in single-story mechanically ventilated double skin facades. Energy and Buildings, 2022, 271, 112304.	3.1	7
7	Exploring the impact of problem formulation in numerical optimization: A case study of the design of PV integrated shading systems. Building and Environment, 2021, 188, 107422.	3.0	7
8	Design and in-field testing of a multi-level system for continuous subjective occupant feedback on indoor climate. Building and Environment, 2021, 189, 107535.	3.0	11
9	Ten questions concerning co-simulation for performance prediction of advanced building envelopes. Building and Environment, 2021, 191, 107570.	3.0	25
10	Impact of double skin facade constructional features on heat transfer and fluid dynamic behaviour. Building and Environment, 2021, 196, 107796.	3.0	39
11	Enabling holistic design for high energy efficient office buildings through the use of subjective occupant feedback. Sustainable Cities and Society, 2021, 69, 102867.	5.1	5
12	A theoretical framework for classifying occupant-centric data streams on indoor climate using a physiological and cognitive process hierarchy. Energy and Buildings, 2021, 241, 110935.	3.1	2
13	Modelling double skin faÃ§ades (DSFs) in whole-building energy simulation tools: Validation and inter-software comparison of a mechanically ventilated single-story DSF. Building and Environment, 2021, 199, 107906.	3.0	25
14	Information match between continuous occupant data streams and one-time manual surveys on indoor climate. Building and Environment, 2021, 204, 108087.	3.0	1
15	Designing the design of experiments (DOE) â€“ An investigation on the influence of different factorial designs on the characterization of complex systems. Energy and Buildings, 2021, 250, 111298.	3.1	96
16	Calibration of DSF model for real-time control. Journal of Physics: Conference Series, 2021, 2069, 012027.	0.3	0
17	Development and validation of a Monte Carlo-based numerical model for solar analyses in urban canyon configurations. Building and Environment, 2020, 170, 106638.	3.0	12
18	Characteristics that matter in a climate faÃ§ade: A sensitivity analysis with building energy simulation tools. Energy and Buildings, 2020, 229, 110467.	3.1	25

#	Article	IF	Citations
19	Co-simulation and validation of the performance of a highly flexible parametric model of an external shading system. Building and Environment, 2020, 182, 107111.	3.0	8
20	Effects of retro-reflective and angular-selective retro-reflective materials on solar energy in urban canyons. Solar Energy, 2020, 209, 662-673.	2.9	10
21	Field investigations of a smiley-face polling station for recording occupant satisfaction with indoor climate. Building and Environment, 2020, 185, 107266.	3.0	19
22	CFD Study of Diffuse Ceiling Ventilation through Perforated Ceiling Panels. Energies, 2020, 13, 1995.	1.6	7
23	Exploiting selective angular properties of retro-reflective coatings to mitigate solar irradiation within the urban canyon. Solar Energy, 2019, 189, 74-85.	2.9	20
24	Modelling of double skin facades in whole-building energy simulation tools: A review of current practices and possibilities for future developments. Building Simulation, 2019, 12, 3-27.	3.0	32
25	A methodology to improve the performance of PV integrated shading devices using multi-objective optimization. Applied Energy, 2019, 247, 731-744.	5.1	78
26	A test bed for thermal fluid dynamic analysis of double skin facade systems. IOP Conference Series: Materials Science and Engineering, 2019, 609, 032006.	0.3	1
27	Investigating the performance of a hybrid PV integrated shading device using multi-objective optimization. Journal of Physics: Conference Series, 2019, 1343, 012086.	0.3	2
28	Simulation and control of shading systems for glazed facades. IOP Conference Series: Earth and Environmental Science, 2019, 352, 012069.	0.2	1
29	A simulation study on the performance of double skin faÃ§ade through experimental design methods and analysis of variance. IOP Conference Series: Materials Science and Engineering, 2019, 609, 062003.	0.3	1
30	Relation between daylight availability and electric lighting in a single-family house. IOP Conference Series: Earth and Environmental Science, 2019, 352, 012034.	0.2	1
31	Sinusoidal response measurement procedure for the thermal performance assessment of PCM by means of dynamic heat flow meter apparatus. Energy and Buildings, 2019, 183, 297-310.	3.1	17
32	Empirical validation and local sensitivity analysis of a lumped-parameter thermal model of an outdoor test cell. Building and Environment, 2018, 130, 151-161.	3.0	20
33	Analysis of a non-calorimetric method for assessment of in-situ thermal transmittance and solar factor of glazed systems. Solar Energy, 2018, 166, 458-471.	2.9	18
34	A Comparative Analysis of the Visual Comfort Performance between a PCM Glazing and a Conventional Selective Double Glazed Unit. Sustainability, 2018, 10, 3579.	1.6	9
35	An inverse approach to identify selective angular properties of retro-reflective materials for urban heat island mitigation. Solar Energy, 2018, 176, 194-210.	2.9	27
36	Current trends and future challenges in the performance assessment of adaptive faÃ§ade systems. Energy and Buildings, 2018, 179, 165-182.	3.1	106

#	Article	IF	Citations
37	Phase Change Materials in Transparent Building Envelopes: A Strengths, Weakness, Opportunities and Threats (SWOT) Analysis. Energies, 2018, 11, 111.	1.6	39
38	Modelling and experimental validation of an algorithm for simulation of hysteresis effects in phase change materials for building components. Energy and Buildings, 2018, 174, 54-67.	3.1	45
39	Laboratory Approaches to Studying Occupants. , 2018, , 169-212.		3
40	Phase Change Materials in Glazing: Implications on Light Distribution and Visual Comfort. Preliminary Results. Energy Procedia, 2017, 111, 357-366.	1.8	10
41	Responsive glazing systems: Characterisation methods, summer performance and implications on thermal comfort. Solar Energy, 2017, 158, 819-836.	2.9	17
42	Daylighting availability in a living laboratory single family house and implication on electric lighting energy demand. Energy Procedia, 2017, 122, 601-606.	1.8	4
43	Balancing competing parameters in search of optimal configurations for a fix louvre blade system with integrated PV. Energy Procedia, 2017, 122, 607-612.	1.8	25
44	Simplified metrics for advanced window systems. Effects on the estimation of energy use for space heating and cooling. Energy Procedia, 2017, 122, 613-618.	1.8	3
45	Responsive glazing systems: Characterisation methods and winter performance. Solar Energy, 2017, 155, 372-387.	2.9	20
46	Advanced transparent facades: market available products and associated challenges in building performance simulation. Energy Procedia, 2017, 132, 496-501.	1.8	6
47	The ZEB Test Cell Laboratory. A facility for characterization of building envelope systems under real outdoor conditions. Energy Procedia, 2017, 132, 531-536.	1.8	16
48	Energy performance assessment of a semi-integrated PV system in a zero emission building through periodic linear regression method. Energy Procedia, 2017, 132, 586-591.	1.8	2
49	Numerical model and simulation of a solar thermal collector with slurry Phase Change Material (PCM) as the heat transfer fluid. Solar Energy, 2016, 134, 429-444.	2.9	51
50	Search for the optimal window-to-wall ratio in office buildings in different European climates and the implications on total energy saving potential. Solar Energy, 2016, 132, 467-492.	2.9	185
51	Experimental analysis of the energy performance of an ACTive, RESponsive and Solar (ACTRESS) faÃ§ade module. Solar Energy, 2016, 133, 226-248.	2.9	31
52	Thermal and electrical performance of an integrated PV-PCM system in double skin faÃ§ades: A numerical study. Solar Energy, 2016, 136, 112-124.	2.9	106
53	Physicalâ€“chemical properties evolution and thermal properties reliability of a paraffin wax under solar radiation exposure in a real-scale PCM window system. Energy and Buildings, 2016, 119, 41-50.	3.1	29
54	Dynamic Thermal Performance of a PCM Window System: Characterization Using Large Scale Measurements. Energy Procedia, 2015, 78, 85-90.	1.8	24

#	Article	IF	Citations
55	Thermal and Optical Properties of a Thermotropic Glass Pane: Laboratory and In-Field Characterization. Energy Procedia, 2015, 78, 116-121.	1.8	14
56	Impact of Opaque Building Envelope Configuration on the Heating and Cooling Energy Need of a Single Family House in Cold Climates. Energy Procedia, 2015, 78, 2626-2631.	1.8	16
57	Spectral and angular solar properties of a PCM-filled double glazing unit. Energy and Buildings, 2015, 87, 302-312.	3.1	100
58	The Impact of an Ideal Dynamic Building Envelope on the Energy Performance of Low Energy Office Buildings. Energy Procedia, 2014, 58, 185-192.	1.8	12
59	Experimental Analysis of an Advanced Dynamic Glazing Prototype Integrating PCM and Thermotropic Layers. Energy Procedia, 2014, 48, 1272-1281.	1.8	47
60	Experimental assessment of the energy performance of an advanced responsive multifunctional faÃ§ade module. Energy and Buildings, 2014, 68, 647-659.	3.1	49
61	Experimental analysis of the energy performance of a full-scale PCM glazing prototype. Solar Energy, 2014, 100, 217-233.	2.9	123
62	Characterization and Energy Performance of a Slurry PCM-based Solar Thermal Collector: A Numerical Analysis. Energy Procedia, 2014, 48, 223-232.	1.8	42
63	Energy Performance Assessment of and Advanced Integrated FaÃ§ade through Experimental Data Analysis. Energy Procedia, 2014, 48, 1262-1271.	1.8	11
64	Energy Performance Assessment of Advanced Integrated FaÃ§ades by Means of Synthetic Metrics. Lecture Notes in Electrical Engineering, 2014, , 21-28.	0.3	1
65	Optimizing the configuration of a faÃ§ade module for office buildings by means of integrated thermal and lighting simulations in a total energy perspective. Applied Energy, 2013, 108, 515-527.	5.1	129
66	Possibilities for characterization of a PCM window system using large scale measurements. International Journal of Sustainable Built Environment, 2013, 2, 56-64.	3.2	45
67	Improving thermal comfort conditions by means of PCM glazing systems. Energy and Buildings, 2013, 60, 442-452.	3.1	118
68	Characterization of the optical properties of a PCM glazing system. Energy Procedia, 2012, 30, 428-437.	1.8	60
69	Thermo-physical behaviour and energy performance assessment of PCM glazing system configurations: A numerical analysis. Frontiers of Architectural Research, 2012, 1, 341-347.	1.3	44
70	A numerical model to evaluate the thermal behaviour of PCM glazing system configurations. Energy and Buildings, 2012, 54, 141-153.	3.1	112
71	Towards an Active, Responsive, and Solar Building Envelope. Journal of Green Building, 2010, 5, 121-136.	0.4	21