Giuseppe Peter Vanoli

List of Publications by Year in Descending Order

71 papers	2,683 citations	28 h-index	51 g-index
72 ext. papers	3,116 ext. citations	6.1 avg, IF	5.56 L-index

#	Paper	IF	Citations
71	Evaluation of Comfort Models Considering the Peculiarities of Hospitalization: Bedding, Clothing and Reduced Activity of Patients. *Buildings*, **2022**, 12, 343	3.2	0
70	Resilience to the climate change of nearly zero energy-building designed according to the EPBD recast: Monitoring, calibrated energy models and perspective simulations of a Mediterranean nZEB living lab. *Energy and Buildings*, **2022**, 262, 112004	7	1
69	Experimental analysis of grills configuration for an open joint ventilated facade in summertime. *Journal of Building Engineering*, **2022**, 54, 104608	5.2	
68	Energy Performance of Buildings: improvements, limits and future perspectives during the last twenty years of energy and sustainability policies **2021**,		1
67	Environmentally friendly opaque ventilated façade for wall retrofit: One year of in-field analysis in Mediterranean climate. *Solar Energy*, **2021**, 228, 495-515	6.8	3
66	Effect of HVAC Management on Indoor Thermo-Hygrometric Comfort and Energy Balance: In Situ Assessments on a Real nZEB. *Energies*, **2021**, 14, 7187	3.1	2
65	Numerical Investigation of a Thermal Ablation Porous Media-Based Model for Tumoral Tissue with Variable Porosity. *Computation*, **2021**, 9, 50	2.2	2
64	Experimental Comparison of Heating Emitters in Mediterranean Climate. *Applied Sciences (Switzerland)*, **2021**, 11, 5462	2.6	
63	Multi-Disciplinary Analysis of Light Shelves Application within a Student Dormitory Refurbishment. *Sustainability*, **2021**, 13, 8251	3.6	2
62	The design of safe classrooms of educational buildings for facing contagions and transmission of diseases: A novel approach combining audits, calibrated energy models, building performance (BPS) and computational fluid dynamic (CFD) simulations. *Energy and Buildings*, **2021**, 230, 110533	7	18
61	Effect of Climate Changes on Renewable Production in the Mediterranean Climate: Case Study of the Energy Retrofit for a Detached House. *Sustainability*, **2021**, 13, 8793	3.6	1
60	Hygro-thermal performance of an opaque ventilated façade with recycled materials during wintertime. *Energy and Buildings*, **2021**, 245, 110994	7	5
59	Comprehensive analysis to drive the energy retrofit of a neighborhood by optimizing the solar energy exploitation An Italian case study. *Journal of Cleaner Production*, **2021**, 314, 127998	10.3	5
58	Impact of weather data and climate change projections in the refurbishment design of residential buildings in cooling dominated climate. *Applied Energy*, **2021**, 303, 117584	10.7	6
57	A Holistic Approach for Energy Renovation of the Town Hall Building in a Typical Small City of Southern Italy. *Sustainability*, **2020**, 12, 7699	3.6	2
56	Green Walls, a Critical Review: Knowledge Gaps, Design Parameters, Thermal Performances and Multi-Criteria Design Approaches. *Energies*, **2020**, 13, 2296	3.1	17
55	The impact of weather data sources on building energy retrofit design: case study in heating-dominated climate of Italian backcountry. *Journal of Building Performance Simulation*, **2020**, 13, 264-284	2.8	5

54	Multi-layered wall with vacuum insulation panels: Results of 5-years in-field monitoring and numerical analysis of aging effect on building consumptions. *Applied Energy*, **2020**, 278, 115605	10.7	8
53	A Novel Contribution for Resilient Buildings. Theoretical Fragility Curves: Interaction between Energy and Structural Behavior for Reinforced Concrete Buildings. *Buildings*, **2020**, 10, 194	3.2	6
52	Numerical optimization for the design of living walls in the Mediterranean climate. *Energy Conversion and Management*, **2019**, 195, 573-586	10.6	8
51	A new comprehensive framework for the multi-objective optimization of building energy design: Harlequin. *Applied Energy*, **2019**, 241, 331-361	10.7	51
50	A framework for NZEB design in Mediterranean climate: Design, building and set-up monitoring of a lab-small villa. *Solar Energy*, **2019**, 184, 11-29	6.8	25
49	Phase Change Materials for Reducing Cooling Energy Demand and Improving Indoor Comfort: A Step-by-Step Retrofit of a Mediterranean Educational Building. *Energies*, **2019**, 12, 3661	3.1	21
48	University building: Energy diagnosis and refurbishment design with cost-optimal approach. Discussion about the effect of numerical modelling assumptions. *Journal of Building Engineering*, **2018**, 18, 1-18	5.2	23
47	A Multi-Criteria Approach to Achieve Constrained Cost-Optimal Energy Retrofits of Buildings by Mitigating Climate Change and Urban Overheating. *Climate*, **2018**, 6, 37	3.1	22
46	Experimental and numerical evaluations on the energy penalty of reflective roofs during the heating season for Mediterranean climate. *Energy*, **2018**, 144, 178-199	7.9	11
45	Acrylic white paint of industrial sector for cool roofing application: Experimental investigation of summer behavior and aging problem under Mediterranean climate. *Solar Energy*, **2018**, 169, 468-487	6.8	14
44	Methodology of the cost-optimality for improving the indoor thermal environment during the warm season. Presentation of the method and application to a new multi-storey building in Berlin. *Applied Energy*, **2017**, 185, 1529-1541	10.7	11
43	CASA, cost-optimal analysis by multi-objective optimisation and artificial neural networks: A new framework for the robust assessment of cost-optimal energy retrofit, feasible for any building. *Energy and Buildings*, **2017**, 146, 200-219	7	64
42	Energy retrofit of educational buildings: Transient energy simulations, model calibration and multi-objective optimization towards nearly zero-energy performance. *Energy and Buildings*, **2017**, 144, 303-319	7	81
41	A new comprehensive approach for cost-optimal building design integrated with the multi-objective model predictive control of HVAC systems. *Sustainable Cities and Society*, **2017**, 31, 136-150	10.1	44
40	Light and Heavy Energy Refurbishments of Mediterranean Offices. Part II: Cost-optimal Energy Renovation of an Institutional Building. *Procedia Engineering*, **2017**, 180, 1518-1530		7
39	Light and Heavy Energy Refurbishments of Mediterranean Offices. Part I: Energy Audit of an Institutional Building on the Naples Coast. *Procedia Engineering*, **2017**, 180, 1506-1517		2
38	Experimental investigation and numerical evaluation of adoption of multi- layered wall with vacuum insulation panel for typical Mediterranean climate. *Energy and Buildings*, **2017**, 152, 108-123	7	14
37	Resilience of robust cost-optimal energy retrofit of buildings to global warming: A multi-stage, multi-objective approach. *Energy and Buildings*, **2017**, 153, 150-167	7	54

36	Artificial neural networks to predict energy performance and retrofit scenarios for any member of a building category: A novel approach. *Energy*, **2017**, 118, 999-1017	7.9	131
35	NZEB target for existing buildings: case study of historical educational building in Mediterranean climate. *Energy Procedia*, **2017**, 140, 194-206	2.3	13
34	Design and performance analysis of a zero-energy settlement in Greece. *International Journal of Low-Carbon Technologies*, **2017**, 12, 141-161	2.8	14
33	Addressing Large-Scale Energy Retrofit of a Building Stock via Representative Building Samples: Public and Private Perspectives. *Sustainability*, **2017**, 9, 940	3.6	14
32	A Multi-Step Approach to Assess the Lifecycle Economic Impact of Seismic Risk on Optimal Energy Retrofit. *Sustainability*, **2017**, 9, 989	3.6	17
31	Energy Audit of Health Care Facilities: Dynamic Simulation of Energy Performances and Energy-Oriented Refurbishment of System and Equipment for Microclimatic Control. *American Journal of Engineering and Applied Sciences*, **2016**, 9, 814-834	0.4	3
30	Net zero-energy buildings in Germany: Design, model calibration and lessons learned from a case-study in Berlin. *Energy and Buildings*, **2016**, 133, 688-710	7	48
29	Multi-objective optimization of the renewable energy mix for a building. *Applied Thermal Engineering*, **2016**, 101, 612-621	5.8	54
28	Simulation-based model predictive control by the multi-objective optimization of building energy performance and thermal comfort. *Energy and Buildings*, **2016**, 111, 131-144	7	134
27	Performance Assessment of a Solar-Assisted Desiccant-Based Air Handling Unit Considering Different Scenarios. *Energies*, **2016**, 9, 724	3.1	10
26	Concept, Design and Energy Performance of a Net Zero-Energy Building in Mediterranean Climate. *Procedia Engineering*, **2016**, 169, 26-37		14
25	Cool materials for reducing summer energy consumptions in Mediterranean climate: In-lab experiments and numerical analysis of a new coating based on acrylic paint. *Applied Thermal Engineering*, **2016**, 102, 91-107	5.8	35
24	MATRIX, a multi activity test-room for evaluating the energy performances of Building/HVAC systems in Mediterranean climate: Experimental set-up and CFD/BPS numerical modeling. *Energy and Buildings*, **2016**, 126, 424-446	7	24
23	Multi-stage and multi-objective optimization for energy retrofitting a developed hospital reference building: A new approach to assess cost-optimality. *Applied Energy*, **2016**, 174, 37-68	10.7	114
22	Optimization of building envelope design for nZEBs in Mediterranean climate: Performance analysis of residential case study. *Applied Energy*, **2016**, 183, 938-957	10.7	119
21	Design the refurbishment of historic buildings with the cost-optimal methodology: The case study of a XV century Italian building. *Energy and Buildings*, **2015**, 99, 162-176	7	57
20	Dynamic insulation of the building envelope: Numerical modeling under transient conditions and coupling with nocturnal free cooling. *Applied Thermal Engineering*, **2015**, 84, 1-14	5.8	29
19	A new methodology for investigating the cost-optimality of energy retrofitting a building category. *Energy and Buildings*, **2015**, 107, 456-478	7	130

18	A new methodology for cost-optimal analysis by means of the multi-objective optimization of building energy performance. *Energy and Buildings*, **2015**, 88, 78-90	7	116
17	Building Envelope, HVAC Systems and RESs for the Energy Retrofit of a Conference Hall on Naples Promenade. *Energy Procedia*, **2015**, 75, 1261-1268	2.3	3
16	Design of the Building Envelope: A Novel Multi-Objective Approach for the Optimization of Energy Performance and Thermal Comfort. *Sustainability*, **2015**, 7, 10809-10836	3.6	79
15	Energy retrofit of an educational building in the ancient center of Benevento. Feasibility study of energy savings and respect of the historical value. *Energy and Buildings*, **2015**, 95, 172-183	7	109
14	Thermal Dynamic Insulation: Numerical Modeling in a Transient Regime and Application to Alternative Aviary Houses. *Energy Procedia*, **2015**, 75, 1711-1721	2.3	2
13	Combined cooling, heating and power for small urban districts: An Italian case-study. *Applied Thermal Engineering*, **2014**, 71, 705-713	5.8	28
12	Energy refurbishment of existing buildings through the use of phase change materials: Energy savings and indoor comfort in the cooling season. *Applied Energy*, **2014**, 113, 990-1007	10.7	211
11	Fluid selection of Organic Rankine Cycle for low-temperature waste heat recovery based on thermal optimization. *Energy*, **2014**, 72, 159-167	7.9	52
10	Experimental validation of a numerical code by thin film heat flux sensors for the resolution of thermal bridges in dynamic conditions. *Applied Energy*, **2014**, 124, 213-222	10.7	31
9	Simplified state space representation for evaluating thermal bridges in building: Modelling, application and validation of a methodology. *Applied Thermal Engineering*, **2013**, 61, 344-354	5.8	34
8	Green roofs in European climates. Are effective solutions for the energy savings in air-conditioning?. *Applied Energy*, **2013**, 104, 845-859	10.7	180
7	Analysis and diagnosis of the energy performance of buildings and districts: Methodology, validation and development of Urban Energy Maps. *Cities*, **2013**, 35, 270-283	5.6	69
6	Rehabilitation of the building envelope of hospitals: Achievable energy savings and microclimatic control on varying the HVAC systems in Mediterranean climates. *Energy and Buildings*, **2013**, 60, 125-138	7	50
5	Different methods for the modelling of thermal bridges into energy simulation programs: Comparisons of accuracy for flat heterogeneous roofs in Italian climates. *Applied Energy*, **2012**, 97, 405-418	10.7	38
4	Transient heat transfer through walls and thermal bridges. Numerical modelling: Methodology and validation **2012**,		4
3	Energy retrofit of historical buildings: theoretical and experimental investigations for the modelling of reliable performance scenarios. *Energy and Buildings*, **2011**, 43, 1925-1936	7	150
2	Miniaturization of Energy Conversion Systems: Energetic Analysis **2005**,		1
1	Evaporation of refrigerants in a smooth horizontal tube: prediction of R22 and R507 heat transfer coefficients and pressure drop. *Applied Thermal Engineering*, **2004**, 24, 2189-2206	5.8	30