Marco Beccali

List of Publications by Year in Descending Order

76 papers	3,033 citations	31 h-index	54 g-index
87 ext. papers	3,452 ext. citations	6.8 avg, IF	5.43 L-index

#	Paper	IF	Citations
76	Road Thermal Collector for Building Heating in South Europe: Numerical Modeling and Design of an Experimental Set-Up. *Energies*, **2022**, 15, 430	3.1	
75	Technical-Economic Evaluation of the Effectiveness of Measures Applied to the Artificial Lighting System of a School. *Applied Sciences (Switzerland)*, **2021**, 11, 6664	2.6	2
74	Solar-assisted heat pumps systems for domestic hot water production in small energy communities. *Solar Energy*, **2021**, 217, 113-133	6.8	7
73	Empirical BAC factors method application to two real case studies in South Italy. *Energy*, **2021**, 236, 121498	7.9	1
72	On the Applicability of the Space Syntax Methodology for the Determination of Street Lighting Classes. *Energies*, **2020**, 13, 1476	3.1	5
71	Assessing the lighting systems flexibility for reducing and managing the power peaks in smart grids. *Applied Energy*, **2020**, 268, 114924	10.7	10
70	Solar and Heat Pump Systems for Domestic Hot Water Production on a Small Island: The Case Study of Lampedusa. *Applied Sciences (Switzerland)*, **2020**, 10, 5968	2.6	3
69	Energy and environmental life-cycle impacts of solar-assisted systems: The application of the tool ELISA *Renewable Energy*, **2020**, 145, 29-40	8.1	16
68	Energy saving and user satisfaction for a new advanced public lighting system. *Energy Conversion and Management*, **2019**, 195, 943-957	10.6	52
67	A solar assisted seasonal borehole thermal energy system for a non-residential building in the Mediterranean area. *Solar Energy*, **2019**, 192, 120-132	6.8	14
66	Space Syntax Analysis Applied to Urban Street Lighting: Relations between Spatial Properties and Lighting Levels. *Applied Sciences (Switzerland)*, **2019**, 9, 3331	2.6	3
65	Assessment of indoor illuminance and study on best photosensors' position for design and commissioning of Daylight Linked Control systems. A new method based on artificial neural networks. *Energy*, **2018**, 154, 466-476	7.9	19
64	Vernacular and bioclimatic architecture and indoor thermal comfort implications in hot-humid climates: An overview. *Renewable and Sustainable Energy Reviews*, **2018**, 82, 1726-1736	16.2	31
63	Concrete thermal energy storage for linear Fresnel collectors: Exploiting the South Mediterranean solar potential for agri-food processes. *Energy Conversion and Management*, **2018**, 166, 719-734	10.6	34
62	On the impact of safety requirements, energy prices and investment costs in street lighting refurbishment design. *Energy*, **2018**, 165, 739-759	7.9	32
61	Analysis of some renewable energy uses and demand side measures for hotels on small Mediterranean islands: A case study. *Energy*, **2018**, 157, 106-114	7.9	10
60	Smart lighting in a historic context: a case study. *Management of Environmental Quality*, **2017**, 28, 282-298	3.6	17

59	A set of indices to assess the real performance of daylight-linked control systems. *Energy and Buildings*, **2017**, 149, 235-245	7	21
58	Energy-environmental and cost assessment of a set of strategies for retrofitting a public building toward nearly zero-energy building target. *Sustainable Cities and Society*, **2017**, 32, 226-234	10.1	66
57	A feasibility study of some DSM enabling solutions in small islands: The case of Lampedusa. *Energy*, **2017**, 140, 1030-1046	7.9	12
56	Sizing analysis of interior lighting using tubular daylighting devices. *Energy Procedia*, **2017**, 126, 179-186	2.3	2
55	Cost optimal analysis of lighting retrofit scenarios in educational buildings in Italy. *Energy Procedia*, **2017**, 126, 171-178	2.3	27
54	Energy balance and life cycle assessment of small size residential solar heating and cooling systems equipped with adsorption chillers. *Solar Energy*, **2017**, 158, 543-558	6.8	23
53	Experimental validation of the BAC factor method for lighting systems **2017**,		1
52	Electrochemical energy storage mitigating impact of electric vehicle on the electric grid: Two Italian case studies **2017**,		2
51	Assessing the feasibility of cogeneration retrofit and district heating/cooling networks in small Italian islands. *Energy*, **2017**, 141, 2572-2586	7.9	20
50	Characterization of a small Mediterranean island end-users electricity consumption: The case of Lampedusa. *Sustainable Cities and Society*, **2017**, 35, 1-12	10.1	18
49	Artificial neural network decision support tool for assessment of the energy performance and the refurbishment actions for the non-residential building stock in Southern Italy. *Energy*, **2017**, 137, 1201-1218	7.9	52
48	Overgrid: A Fully Distributed Demand Response Architecture Based on Overlay Networks. *IEEE Transactions on Automation Science and Engineering*, **2017**, 14, 471-481	4.9	29
47	A Multifunctional Public Lighting Infrastructure, Design and Experimental Test. *Journal of Sustainable Development of Energy, Water and Environment Systems*, **2017**, 5, 608-625	1.9	5
46	Aspects and issues of daylighting assessment: A review study. *Renewable and Sustainable Energy Reviews*, **2016**, 66, 852-860	16.2	42
45	Use of finite element models for estimating thermal performance of fade-integrated solar thermal collectors. *Applied Energy*, **2016**, 171, 392-404	10.7	18
44	Experimental results on adsorption beds for air dehumidification. *International Journal of Refrigeration*, **2016**, 63, 100-112	3.8	13
43	Life Cycle Assessment of a compact Desiccant Evaporative Cooling system: The case study of the Breescoo *Solar Energy Materials and Solar Cells*, **2016**, 156, 83-91	6.4	28
42	Solar heating and cooling systems versus conventional systems assisted by photovoltaic: Application of a simplified LCA tool. *Solar Energy Materials and Solar Cells*, **2016**, 156, 92-100	6.4	34

41	A Simplified LCA Tool for Solar Heating and Cooling Systems. *Energy Procedia*, **2016**, 91, 317-324	2.3	11
40	Monitoring Results and Energy Performances Evaluation of Freescoo Solar DEC Systems. *Energy Procedia*, **2016**, 91, 752-758	2.3	3
39	Quality Assurance and Support Measures for Solar Cooling on System Level. *Energy Procedia*, **2016**, 91, 792-798	2.3	2
38	Building Integrated Solar Thermal Design: Assessment of Performances of a Low Cost Solar Wall in a Typical Italian Building. *Energy Procedia*, **2016**, 91, 916-925	2.3	6
37	Improvement of energy efficiency and quality of street lighting in South Italy as an action of Sustainable Energy Action Plans. The case study of Comiso (RG). *Energy*, **2015**, 92, 394-408	7.9	58
36	Second Generation of Freescoo Solar DEC Prototypes for Residential Applications. *Energy Procedia*, **2015**, 70, 427-434	2.3	8
35	Assessment of the technical and economic potential of offshore wind energy via a GIS application: A case study for the Sicily Region according to Italian laws and incentive frameworks **2015**,		2
34	A laboratory setup for the evaluation of the effects of BACS and TBM systems on lighting **2015**,		6
33	Assessment of the Entropy of Spatial and Time Distributions of Rooms Daylighting: a Possible Tool for a Sustainable Design. *Journal of Sustainable Development of Energy, Water and Environment Systems*, **2015**, 3, 425-435	1.9	5
32	Innovative Compact Solar Air Conditioner based on Fixed and Cooled Adsorption Beds and Wet Heat Exchangers. *Energy Procedia*, **2014**, 48, 819-827	2.3	6
31	Life cycle performance assessment of small solar thermal cooling systems and conventional plants assisted with photovoltaics. *Solar Energy*, **2014**, 104, 93-102	6.8	36
30	Energy retrofit of a single-family house: Life cycle net energy saving and environmental benefits. *Renewable and Sustainable Energy Reviews*, **2013**, 27, 283-293	16.2	102
29	Method for size optimisation of large wind-hydrogen systems with high penetration on power grids. *Applied Energy*, **2013**, 102, 534-544	10.7	50
28	Is the NZEB Benchmarking Approach Suitable for Assessing Energy Retrofit Design?. *Applied Mechanics and Materials*, **2013**, 361-363, 402-407	0.3	10
27	Application of Adaptive Models for the Determination of the Thermal Behaviour of a Photovoltaic Panel. *Lecture Notes in Computer Science*, **2013**, 344-358	0.9	
26	Benefits of Refurbishment **2013**, 99-117		3
25	Energy performance evaluation of a demo solar desiccant cooling system with heat recovery for the regeneration of the adsorption material. *Renewable Energy*, **2012**, 44, 40-52	8.1	54
24	Advanced solar assisted desiccant and evaporative cooling system equipped with wet heat exchangers. *Solar Energy*, **2012**, 86, 608-618	6.8	56

23	LCA of a solar heating and cooling system equipped with a small water–ammonia absorption chiller. *Solar Energy*, **2012**, 86, 1491-1503	6.8	53
22	Nomograph for rapid technical and economic assessment of solar thermal systems for DHW production. *Solar Energy*, **2012**, 86, 2472-2485	6.8	8
21	Numerical evaluation on performances of AHU equipped with a cross flow heat exchanger in wet and dry operation. *Energy Procedia*, **2012**, 30, 515-523	2.3	3
20	Life Cycle Assessment Performance Comparison of Small Solar Thermal Cooling Systems with Conventional Plants Assisted with Photovoltaics. *Energy Procedia*, **2012**, 30, 893-903	2.3	22
19	Energy and environmental benefits in public buildings as a result of retrofit actions. *Renewable and Sustainable Energy Reviews*, **2011**, 15, 460-470	16.2	162
18	Life cycle assessment of Italian citrus-based products. Sensitivity analysis and improvement scenarios. *Journal of Environmental Management*, **2010**, 91, 1415-28	7.9	69
17	Estimation of wind velocity over a complex terrain using the Generalized Mapping Regressor. *Applied Energy*, **2010**, 87, 884-893	10.7	32
16	Resource consumption and environmental impacts of the agrofood sector: life cycle assessment of italian citrus-based products. *Environmental Management*, **2009**, 43, 707-24	3.1	86
15	Assessment of bioenergy potential in Sicily: A GIS-based support methodology. *Biomass and Bioenergy*, **2009**, 33, 79-87	5.3	83
14	Energy and economic assessment of desiccant cooling systems coupled with single glazed air and hybrid PV/thermal solar collectors for applications in hot and humid climate. *Solar Energy*, **2009**, 83, 1828-1846	6.8	94
13	An empirical approach for ranking environmental and energy saving measures in the hotel sector. *Renewable Energy*, **2009**, 34, 82-90	8.1	47
12	Energy, economic and environmental analysis on RET-hydrogen systems in residential buildings. *Renewable Energy*, **2008**, 33, 366-382	8.1	96
11	Energy performances and life cycle assessment of an Italian wind farm. *Renewable and Sustainable Energy Reviews*, **2008**, 12, 200-217	16.2	165
10	Short-term prediction of household electricity consumption: Assessing weather sensitivity in a Mediterranean area. *Renewable and Sustainable Energy Reviews*, **2008**, 12, 2040-2065	16.2	87
9	Building energy performance: A LCA case study of kenaf-fibres insulation board. *Energy and Buildings*, **2008**, 40, 1-10	7	192
8	Environmental effects of energy policy in sicily: The role of renewable energy. *Renewable and Sustainable Energy Reviews*, **2007**, 11, 282-298	16.2	41
7	THE POTENTIAL OF RENEWABLE ENERGIES IN SICILY FOR WATER DESALINATION APPLICATIONS **2007**, 179-194		
6	F.A.L.C.A.D.E.: a fuzzy software for the energy and environmental balances of products. *Ecological Modelling*, **2004**, 176, 359-379	3	41

5	Forecasting daily urban electric load profiles using artificial neural networks. *Energy Conversion and Management*, **2004**, 45, 2879-2900	10.6	170
4	Update on desiccant wheel model. *International Journal of Energy Research*, **2004**, 28, 1043-1049	4.5	28
3	Simplified models for the performance evaluation of desiccant wheel dehumidification. *International Journal of Energy Research*, **2003**, 27, 17-29	4.5	64
2	Decision-making in energy planning. Application of the Electre method at regional level for the diffusion of renewable energy technology. *Renewable Energy*, **2003**, 28, 2063-2087	8.1	306
1	Decision making in energy planning: the ELECTRE multicriteria analysis approach compared to a FUZZY-SETS methodology. *Energy Conversion and Management*, **1998**, 39, 1869-1881	10.6	95