Alvaro Gomes

List of Publications by Year in descending order

70 papers	1,488 citations	304368 22 h-index	344852 36 g-index
74 all docs	74 docs citations	74 times ranked	1492 citing authors

#	Article	IF	Citations
1	Lessons from unsuccessful energy and buildings sustainability actions in university campus operations. Journal of Cleaner Production, 2021, 297, 126665.	4.6	15
2	Energy Transition on Islands with the Presence of Electric Vehicles: A Case Study for Porto Santo. Energies, 2021, 14, 3439.	1.6	21
3	A Comparative Study on Machine Learning Algorithms for Assessing Energy Efficiency of Buildings. Communications in Computer and Information Science, 2021, , 546-566.	0.4	3
4	The contribution of ventilation on the energy performance of small residential buildings in the Mediterranean region. Energy, 2020, 191, 116577.	4.5	9
5	A review of empirical data of sustainability initiatives in university campus operations. Journal of Cleaner Production, 2020, 250, 119558.	4.6	84
6	Characterization of Aggregated Demand-side Flexibility of Small Consumers. , 2020, , .		3
7	Modelling demand flexibility and energy storage to support increased penetration of renewable energy resources on Porto Santo. , 2020, 10, 1118-1132.		3
8	Energy Audits and Energy Efficiency in Small Wastewater Treatment Plants: A Case Study. , 2020, , 766-777.		1
9	CASOS DE VIOLÃŠNCIA VERBAL NO FUTEBOL E NAS REDES DE COMPUTADOR Ã€ LUZ DA TEORIA DOS ATOS DE LINGUAGEM. Cadernos De Linguagem E Sociedade, 2020, 20, 134-149.	0.1	0
10	Thermal transmittance effect on energy consumption of Mediterranean buildings with different thermal mass. Applied Energy, 2019, 252, 113437.	5.1	46
11	Performance-based design of multi-story buildings for a sustainable urban environment: A case study. Renewable and Sustainable Energy Reviews, 2019, 113, 109243.	8.2	23
12	A Comparison of MILP and Metaheuristic Approaches for Implementation of a Home Energy Management System under Dynamic Tariffs. , 2019, , .		12
13	Optimizing the management of smart home energy resources under different power cost scenarios. Applied Energy, 2019, 242, 351-363.	5.1	84
14	The impact of thermal transmittance variation on building design in the Mediterranean region. Applied Energy, 2019, 239, 581-597.	5.1	24
15	Demand management for load smoothing in small power systems: the case of Porto Santo island. , 2019, , .		2
16	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.	2.0	32
17	The Duck Curve Characteristic and Storage Requirements for Greening the Island of Porto Santo. , 2018, , .		22
18	A Mixed-integer Linear Programming Model for Optimal Management of Residential Electrical Loads under Dynamic Tariffs. , 2018, , .		9

#	Article	IF	Citations
19	The Role of Demand Response in Power Systems With Low Inertia. , 2018, , .		0
20	Optimizing residential energy resources with an improved multi-objective genetic algorithm based on greedy mutations. , 2018, , .		2
21	Review on performance aspects of nearly zero-energy districts. Sustainable Cities and Society, 2018, 43, 406-420.	5.1	80
22	Estimation of renewable energy and built environment-related variables using neural networks â€“ A review. Renewable and Sustainable Energy Reviews, 2018, 94, 959-988.	8.2	43
23	The potential impact of low thermal transmittance construction on the European design guidelines of residential buildings. Energy and Buildings, 2018, 178, 379-390.	3.1	12
24	Clustering of architectural floor plans: A comparison of shapeÂrepresentations. Automation in Construction, 2017, 80, 48-65.	4.8	12
25	A Customized Evolutionary Algorithm for Multiobjective Management of Residential Energy Resources. IEEE Transactions on Industrial Informatics, 2017, 13, 492-501.	7.2	57
26	An Evolutionary Algorithm for the Optimization of Residential Energy Resources. Trends in Mathematics, 2017, , 3-16.	0.1	2
27	An Integrated Building Energy Management System. , 2017, , 191-199.		2
28	A contribution of demand response for the reliability of a power system. , 2016, , .		5
29	An energy management system for residential demand response based on multiobjective optimization. , 2016, , .		10
30	Quantitative Assessment of Advanced Energy Efficiency Retrofitting for Hospitals in India. , 2016, , .		0
31	A thermal performance parametric study of window type, orientation, size and shadowing effect. Sustainable Cities and Society, 2016, 26, 456-465.	5.1	49
32	An Approach to Urban Quarter Design Using Building Generative Design and Thermal Performance Optimization. Energy Procedia, 2015, 78, 2899-2904.	1.8	13
33	Integration of the Electric Vehicle as a Manageable Load in a Residential Energy Management System. , 2015, , .		5
34	How reliable are geometry-based building indices as thermal performance indicators?. Energy Conversion and Management, 2015, 101, 561-578.	4.4	26
35	Crowdsourced Clustering of Computer Generated Floor Plans. Lecture Notes in Computer Science, 2015, , 142-151.	1.0	4
36	Integrated Management of Energy Resources in the Residential Sector Using Evolutionary Computation. Advances in Environmental Engineering and Green Technologies Book Series, 2015, , 320-347.	0.3	2

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37	Development of an Algorithm to Control and Optimize the Coordinated Charging Process of a Group of Electric Vehicles. , 2014, , .		3
38	Optimizing the Coordinated Charging of a Group of Electric Vehicles. , 2014, , .		4
39	A hybrid multi-objective GRASP+SA algorithm with incorporation of preferences. , 2014, , .		3
40	Categorization of residential electricity consumption as a basis for the assessment of the impacts of demand response actions. Renewable and Sustainable Energy Reviews, 2014, 30, 490-503.	8.2	97
41	Automated approach for design generation and thermal assessment of alternative floor plans. Energy and Buildings, 2014, 81, 170-181.	3.1	33
42	Improving thermal performance of automatically generated floor plans using a geometric variable sequential optimization procedure. Applied Energy, 2014, 132, 200-215.	5.1	21
43	A multi-objective genetic approach to domestic load scheduling in an energy management system. Energy, 2014, 77, 144-152.	4.5	101
44	Incorporation of Preferences in an Evolutionary Algorithm Using an Outranking Relation. , 2014, , 66-89.		0
45	A physically-based model for simulating inverter type air conditioners/heat pumps. Energy, 2013, 50, 110-119.	4.5	29
46	An evolutionary strategy enhanced with a local search technique for the space allocation problem in architecture, Part 1: Methodology. CAD Computer Aided Design, 2013, 45, 887-897.	1.4	54
47	An approach to the multi-level space allocation problem in architecture using a hybrid evolutionary technique. Automation in Construction, 2013, 35, 482-498.	4.8	48
48	An evolutionary strategy enhanced with a local search technique for the space allocation problem in architecture, Part 2: Validation and performance tests. CAD Computer Aided Design, 2013, 45, 898-910.	1.4	34
49	A comparative study of different approaches using an outranking relation in a multi-objective evolutionary algorithm. Computers and Operations Research, 2013, 40, 1602-1615.	2.4	17
50	A hybrid evolutionary simulated annealing algorithm with incorporation of preferences. , 2013, , .		0
51	An automated energy management system in a smart grid context. , 2012, , .		7
52	Domestic load characterization for demand-responsive energy management systems. , 2012, , .		11
53	Integrated Management of Residential Energy Resources. EPJ Web of Conferences, 2012, 33, 05005.	0.1	4
54	Impacts of demand side management and micro-generation units on low voltage distribution radial networks. , 2011, , .		4

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55	Demand modeling for assessing the impacts of micro-generation in a low voltage radial distribution network. , 2011, , .		3
56	Incorporation of Preferences in an Evolutionary Algorithm Using an Outranking Relation. International Journal of Natural Computing Research, 2011, 2, 63-85.	0.5	5
57	Assessing the Impact of Micro Generation in Radial Low Voltage Distribution Networks Taking into Consideration the Uncertainty. , 2011, , .		3
58	Improving the responsiveness of NSGA-II using an adaptive mutation operator: a case study. International Journal of Advanced Intelligence Paradigms, 2010, 2, 4.	0.2	4
59	Energy services as a tool to promote energy efficiency in the health sector. , 2009, , .		5
60	A multi-objective evolutionary algorithm for reactive power compensation in distribution networks. Applied Energy, 2009, 86, 977-984.	5.1	66
61	Physically-based load demand models for assessing electric load control actions. , 2009, , .		10
62	Design of an adaptive mutation operator in an electrical load management case study. Computers and Operations Research, 2008, 35, 2925-2936.	2.4	11
63	A two-phase decision support approach for the selection of load control actions. , 2008, , .		0
64	Improving the Responsiveness of NSGA-II in Dynamic Environments Using an Adaptive Mutation Operator â€“ A Case Study. Lecture Notes in Computer Science, 2008, , 90-97.	1.0	0
65	A Multiple Objective Approach to Direct Load Control Using an Interactive Evolutionary Algorithm. IEEE Transactions on Power Systems, 2007, 22, 1004-1011.	4.6	80
66	Correction to "A Multiple Objective Evolutionary Approach for the Design and Selection of Load Control Strategies". IEEE Transactions on Power Systems, 2004, 19, 2124-2124.	4.6	1
67	A Multiple Objective Evolutionary Approach for the Design and Selection of Load Control Strategies. IEEE Transactions on Power Systems, 2004, 19, 1173-1180.	4.6	48
68	Simulation-based assessment of electric load management programs. International Journal of Energy Research, 1999, 23, 169-181.	2.2	24
69	Maximum demand control: a survey and comparative evaluation of different methods. IEEE Transactions on Power Systems, 1993, 8, 1013-1019.	4.6	8
70	A PC-based simulation package for supporting end-user demand side energy management strategies. IEEE Transactions on Power Systems, 1991, 6, 897-903.	4.6	10