Maria Castilla

List of Publications by Year
in descending order

41 papers	783 citations	858243 12 h-index	591227 27 g-index
44 all docs	44 docs citations	44 times ranked	1091 citing authors

#	Article	IF	Citations
1	Cost function optimization for predictive control of a fiveâ€phase IM drive. Optimal Control Applications and Methods, 2020, 41, 84-93.	1.3	16
2	Multiobjective control architecture to estimate optimal set points for user comfort and energy saving in buildings. ISA Transactions, 2020, 99, 454-464.	3.1	11
3	Very Short-Term Power Forecasting of High Concentrator Photovoltaic Power Facility by Implementing Artificial Neural Network. Energies, 2020, 13, 3493.	1.6	9
4	Event-based state-space model predictive control of a renewable hydrogen-based microgrid for office power demand profiles. Journal of Power Sources, 2020, 450, 227670.	4.0	22
5	A Hardware-in-the-Loop Prototype to design Benchmarks for Automation and Control Education. IFAC-PapersOnLine, 2020, 53, 17314-17319.	0.5	4
6	An Indoor Illuminance Prediction Model Based on Neural Networks for Visual Comfort and Energy Efficiency Optimization Purposes. Lecture Notes in Computer Science, 2019, , 146-156.	1.0	4
7	Development of an open experimentation tool based on JavaScript for the control of a fourâ€tank plant. Computer Applications in Engineering Education, 2018, 26, 228-238.	2.2	2
8	An Artificial Neural Network (ANN) model to predict the electric load profile for an HVAC system âž âžThis work has been funded by the grant from the Spanish Ministry of Economy and Competitiveness (ENERPRO DPI 2014-56364-C2-1-R). Yaser I. Alamin is a fellow of the MARHABA, an Erasmus Mundus Lot 3 project. JosÃ© Domingo Ã¡lvarez is a fellow of the Spanish â€˜RamÃ³n y Cajalâ€™ contract program, co-financed by the European Social Fund. Antonio Ruano acknowledges the support of FCT through IDMEC, under LAETA grant UID/. IFAC-PapersOnLine, 2018, 51, 26-31.	0.5	17
9	Repetitive Control to Improve Usersâ€™ Thermal Comfort and Energy Efficiency in Buildings. Energies, 2018, 11, 976.	1.6	5
10	Optimal Management of a Microgrid to Guarantee usersâ€™ Thermal Comfort. , 2018, , .		2
11	OptimizaciÃ³n de Funciones de Coste para Control Predictivo de MÃ¡quinas de InducciÃ³n MultifÃ¡sicas. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2018, 16, 48.	0.6	8
12	PhotoBioLib: A Modelica library for modeling and simulation of large-scale photobioreactors. Computers and Chemical Engineering, 2017, 98, 12-20.	2.0	7
13	cFertigUAL: A fertigation management app for greenhouse vegetable crops. Agricultural Water Management, 2017, 183, 186-193.	2.4	27
14	An Economic Model-Based Predictive Control to Manage the Usersâ€™ Thermal Comfort in a Building. Energies, 2017, 10, 321.	1.6	32
15	A Comparison of Energy Consumption Prediction Models Based on Neural Networks of a Bioclimatic Building. Energies, 2016, 9, 57.	1.6	83
16	Architecture to develop semiâ€virtual industrial laboratories for the interactive learning of process automation. Computer Applications in Engineering Education, 2016, 24, 335-346.	2.2	10
17	A proposal for teaching SCADA systems using Virtual Industrial Plants in Engineering Education. IFAC-PapersOnLine, 2016, 49, 138-143.	0.5	3
18	A room simulation tool for thermal comfort control in a bioclimatic building: A real example of use with an optimal controller. Optimal Control Applications and Methods, 2016, 37, 479-495.	1.3	4

#	Article	IF	Citations
19	An efficient modelling for temperature control of residential buildings. Building and Environment, 2016, 103, 86-98.	3.0	13
20	Semi-virtual Plant for the Modelling, Control and Supervision of batch-processes. An example of a greenhouse irrigation system. IFAC-PapersOnLine, 2015, 48, 123-128.	0.5	5
21	A comparison between temperature modeling strategies in smart buildings. , 2015, , .		2
22	A fuzzy controller for visual comfort inside a meeting-room. , 2015, , .		5
23	A Comparative Analysis of Room Air Temperature Modelling for Control Purposes. , 2015, , .		1
24	Thermal comfort control using a non-linear MPC strategy: A real case of study in a bioclimatic building. Journal of Process Control, 2014, 24, 703-713.	1.7	76
25	A prediction model based on neural networks for the energy consumption of a bioclimatic building. Energy and Buildings, 2014, 82, 142-155.	3.1	131
26	Comfort in Buildings. Advances in Industrial Control, 2014, , 39-78.	0.4	2
27	A Neural Network Model for Energy Consumption Prediction of CIESOL Bioclimatic Building. Advances in Intelligent Systems and Computing, 2014, , 51-60.	0.5	9
28	Comfort Control Techniques for the Users of a Room. Advances in Industrial Control, 2014, , 143-218.	0.4	1
29	Minimization of the Operation Costs of a Solar/Gas Airconditioning System Using Duration-based Predictive Control. Energy Procedia, 2013, 42, 784-793.	1.8	3
30	Neural network and polynomial approximated thermal comfort models for HVAC systems. Building and Environment, 2013, 59, 107-115.	3.0	67
31	Subharmonic content in Finite-State Model Predictive Current Control of IM. , 2013, , .		6
32	A multivariable nonlinear MPC control strategy for thermal comfort and indoor-air quality. , 2013, , .		12
33	Productiveness and Real Time Prices in energy management for HVAC systems. , 2013, , .		8
34	Repetitive control to counteract the effect of people on thermal comfort control. , 2013, , .		1
35	A nonlinear model based predictive control strategy to maintain thermal comfort inside a bioclimatic building. , 2012, , .		8
36	A comparison of thermal comfort predictive control strategies. Energy and Buildings, 2011, 43, 2737-2746.	3.1	120

#	Article	IF	Citations
37	Thermal Comfort Predictive Control Strategies for a Solar Energy Research Center. , 2011, , .		0
38	Remote Laboratory for a Flexible Manufacturing Cell. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 42, 168-173.	0.4	0
39	Comfort optimization in a solar energy research center. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 36-41.	0.4	4
40	TÃ©cnicas de Control del Confort en Edificios. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2010, 7, 5-24.	0.6	18
41	Economic dispatch of a bioclimatic office building considering thermal energy, electricity and water demands. Renewable Energy and Power Quality Journal, 0, 18, 568-573.	0.2	0