Guillermo Valencia-Palomo

List of Publications by Year
in descending order

66	930	430874	526287
papers	citations	18 h-index	27 g-index

67	67	67	756
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Vibration Control Using a Positive Position Feedback-based Predictive Controller Applied to a One-Bay Three-Story Scaled Shear Frame. Journal of Vibration Engineering and Technologies, 2023, 11, 873-885.	2.2	1
2	Observer for a class of Lipschitz nonlinear systems with multiple timeâ€varying delays in the nonlinear measured outputs. Asian Journal of Control, 2022, 24, 1122-1132.	3.0	8
3	HVAC Control System Using Predicted Mean Vote Index for Energy Savings in Buildings. Buildings, 2022, 12, 38.	3.1	10
4	Pressure Sensor Placement for Leak Localization in Water Distribution Networks Using Information Theory. Sensors, 2022, 22, 443.	3.8	12
5	Disturbance observer for uncertain Lipschitz nonlinear systems under multiple time-varying delays. Computational and Applied Mathematics, 2022, 41, 1.	2.2	2
6	Fault diagnosis in wind turbines based on ANFIS and Takagiâ€“Sugeno interval observers. Expert Systems With Applications, 2022, 206, 117698.	7.6	19
7	Predictive Control in Water Distribution Systems for Leak Reduction and Pressure Management via a Pressure Reducing Valve. Processes, 2022, 10, 1355.	2.8	3
8	Nonlinear control strategies for a UAV carrying a load with swing attenuation. Applied Mathematical Modelling, 2021, 91, 709-722.	4.2	36
9	Leak diagnosis in pipelines using a combined artificial neural network approach. Control Engineering Practice, 2021, 107, 104677.	5.5	42
10	Actuator fault estimation based on a proportional-integral observer with nonquadratic Lyapunov functions. International Journal of Systems Science, 2021, 52, 1938-1951.	5.5	13
11	Filtered Observer-Based IDA-PBC Control for Trajectory Tracking of a Quadrotor. IEEE Access, 2021, 9, 114821-114835.	4.2	17
12	Optimal Estimation of the Roughness Coefficient and Friction Factor of a Pipeline. Journal of Fluids Engineering, Transactions of the ASME, 2021, 143, .	1.5	1
13	Advanced Mathematics and Computational Applications in Control Systems Engineering. Mathematical and Computational Applications, 2021, 26, 20.	1.3	0
14	Passivityâ€based control laws for an unmanned powered parachute aircraft. Asian Journal of Control, 2021, 23, 2087-2096.	3.0	10
15	DetecciÃ³n de fallas en vehÃculos aÃ©reos no tripulados mediante seÃ±ales de orientaciÃ³n y tÃ©cnicas de aprendizaje de mÃ¡quina. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2021, 18, 254.	1.0	4
16	A Predictive Control Strategy for Aerial Payload Transportation with an Unmanned Aerial Vehicle. Mathematics, 2021, 9, 1822.	2.2	15
17	Robust IDA-PBC for under-actuated systems with inertia matrix dependent of the unactuated coordinates: application to a UAV carrying a load. Nonlinear Dynamics, 2021, 105, 3225-3238.	5.2	16
18	Actuator and sensor fault estimation based on a proportional multipleâ€integral sliding mode observer for linear parameter varying systems with inexact scheduling parameters. International Journal of Robust and Nonlinear Control, 2021, 31, 8420-8441.	3.7	13

#	Article	IF	Citations
19	Observer for nonâ€linear systems with sampled measurements: Application to the friction factor estimation of a pipeline. IET Control Theory and Applications, 2021, 15, 432-445.	2.1	4
20	Optimal control in a pipeline coupled to a pressure reducing valve for pressure management and leakage reduction. , 2021, , .		3
21	Efficient predictive vibration control of a buildingâ€like structure. Asian Journal of Control, 2020, 22, 1411-1421.	3.0	5
22	Robust qLPV Tracking Fault-Tolerant Control of a 3 DOF Mechanical Crane. Mathematical and Computational Applications, 2020, 25, 48.	1.3	8
23	Simultaneous Optimal Estimation of Roughness and Minor Loss Coefficients in a Pipeline. Mathematical and Computational Applications, 2020, 25, 56.	1.3	8
24	Recent Advances on Optimization for Control, Observation, and Safety. Processes, 2020, 8, 201.	2.8	1
25	FAULT DIAGNOSIS SYSTEMS IN UNMANNED AERIAL VEHICLES. Dyna (Spain), 2020, 95, 352-352.	0.2	2
26	Decentralized robust tube-based model predictive control: Application to a four-tank -system. Revista Mexicana De Ingeniera Quimica, 2020, 19, 1135-1151.	0.4	12
27	On the Selection of Tuning Parameters in Predictive Controllers Based on NSGA-II. Studies in Computational Intelligence, 2019, , 138-157.	0.9	0
28	Energy-Based Control and LMI-Based Control for a Quadrotor Transporting a Payload. Mathematics, 2019, 7, 1090.	2.2	24
29	A Review of Convex Approaches for Control, Observation and Safety of Linear Parameter Varying and Takagi-Sugeno Systems. Processes, 2019, 7, 814.	2.8	40
30	Implementation of a Distributed Optimal Predictive Control in a Quadruple Tank System. IEEE Latin America Transactions, 2019, 17, 135-146.	1.6	1
31	Actuator fault detection and isolation on a quadrotor unmanned aerial vehicle modeled as a linear parameter-varying system. Measurement and Control, 2019, 52, 1228-1239.	1.8	44
32	Environmental Impacts of Energy Saving Actions in an Academic Building. Sustainability, 2019, 11, 989.	3.2	10
33	Fault diagnosis observer for descriptor Takagi-Sugeno systems. Neurocomputing, 2019, 331, 10-17.	5.9	26
34	Sensor Fault Diagnosis Based on a Sliding Mode and Unknown Input Observer for Takagiâ€Sugeno Systems with Uncertain Premise Variables. Asian Journal of Control, 2019, 21, 339-353.	3.0	34
35	Actuator and sensor fault estimation based on a proportional-integral quasi-LPV observer with inexact scheduling parameters. IFAC-PapersOnLine, 2019, 52, 100-105.	0.9	6
36	Diagnosis of Fluid Leaks in Pipelines Using Dynamic PCA. IFAC-PapersOnLine, 2018, 51, 373-380.	0.9	28

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37	Modeling and Simulation of a Hydraulic Network for Leak Diagnosis. Mathematical and Computational Applications, 2018, 23, 70.	1.3	15
38	Non-Intrusive Electric Load identification using Wavelet Transform. Ingenieria E Investigacion, 2018, 38, 42-51.	0.4	8
39	Observer-based LPV stabilization system for a riderless bicycle. IEEE Latin America Transactions, 2018, 16, 1076-1083.	1.6	5
40	Sensor Fault Diagnosis Observer for an Electric Vehicle Modeled as a Takagi-Sugeno System. Journal of Sensors, 2018, 2018, 1-9.	1.1	16
41	Using the second-order information for reconfigurability analysis and design in the fault tolerant framework. Automatika, 2018, 59, 51-62.	2.0	1
42	An Improved Move-Blocking Strategy in Predictive Control for Setpoint Tracking. IEEE Latin America Transactions, 2017, 15, 806-812.	1.6	0
43	Observer synthesis for a class of Takagiâ€“Sugeno descriptor system with unmeasurable premise variable. Application to fault diagnosis. International Journal of Systems Science, 2017, 48, 3419-3430.	5.5	20
44	Modeling PD Closed-loop Control Problems with Fuzzy Differential Equations. Automatika, 2016, 57, 960-967.	2.0	3
45	Fabrication and Characterization of CdS Thin Film Synthesized by CBD Deposited from pH-Controlled Growth Solutions for Solar Cells Applications. Metallography, Microstructure, and Analysis, 2016, 5, 62-68.	1.0	3
46	Object Transportation Using a Cooperative Mobile Multi-Robot System. IEEE Latin America Transactions, 2016, 14, 1184-1191.	1.6	13
47	Long horizon input parameterisations to enlarge the region of attraction of MPC. Optimal Control Applications and Methods, 2016, 37, 139-153.	2.1	10
48	Pressure Effect on the Deposition in the a-Si:H Films by PECVD Process for Solar Cell Applications. Microscopy and Microanalysis, 2015, 21, 297-298.	0.4	2
49	Comparative Analysis between Conventional PI and Fuzzy LogicPI Controllers for Indoor Benzene Concentrations. Sustainability, 2015, 7, 5398-5412.	3.2	13
50	Systematic selection of tuning parameters for efficient predictive controllers using a multiobjective evolutionary algorithm. Applied Soft Computing Journal, 2015, 31, 326-338.	7.2	25
51	Improving the feed-forward compensator in predictive control for setpoint tracking. ISA Transactions, 2014, 53, 755-766.	5.7	27
52	On control of discrete-time state-dependent jump linear systems with probabilistic constraints: A receding horizon approach. Systems and Control Letters, 2014, 74, 81-89.	2.3	19
53	Novel programmable logic controller implementation of a predictive controller based on Laguerre functions and multiparametric solutions. IET Control Theory and Applications, 2012, 6, 1003-1014.	2.1	23
54	Alternative parameterisations for predictive control: How and why?. , 2011, , .		13

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55	Exploiting Kautz functions to improve feasibility in MPC. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 6777-6782.	0.4	18
56	Efficient suboptimal parametric solutions to predictive control for PLC applications. Control Engineering Practice, 2011, 19, 732-743.	5.5	45
57	Programmable logic controller implementation of an auto-tuned predictive control based on minimal plant information. ISA Transactions, 2011, 50, 92-100.	5.7	61
58	Efficient suboptimal parametric implementations for predictive control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 551-556.	0.4	1
59	A move-blocking strategy to improve tracking in predictive control. , 2010, , .		6
60	Using Laguerre functions to improve efficiency of multi-parametric predictive control. , 2010, , .		18
61	Efficient algorithms for trading off feasibility and performance in predictive control. International Journal of Control, 2010, 83, 789-797.	1.9	46
62	PLC implementation of a predictive controller using Laguerre functions and multi-parametric solutions. , 2010, , .		2
63	Feed forward design in MPC. , 2009, , .		8
64	Predictive Control implementation in a PLC using the IEC 1131.3 programming standard. , 2009, , .		14
65	Auto-tuned Predictive Control Based on Minimal Plant Information. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 554-559.	0.4	13
66	TEST-BASED PARAMETER ESTIMATION OF A BENCH-SCALE DISTILLATION COLUMN FOR PREDICTIVE CONTROL. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 315-320.	0.4	0