

# Claudio ----- Garcia

## List of Publications by Year in descending order

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74  
papers

472  
citations

933447

10  
h-index

794594

19  
g-index

75  
all docs

75  
docs citations

75  
times ranked

325  
citing authors

#	ARTICLE	IF	CITATIONS
1	System identification with historical data: A multivariable approach applied to a 50MW petrochemical furnace. Computers and Chemical Engineering, 2022, 157, 107623.	3.8	2
2	Optimal order selection for high order ARX models. , 2021, 108, 102897.		2
3	LQR and PID Control Design for a Pneumatic Diaphragm Valve. , 2021, , .		2
4	Estimation of Second-Order plus Time Delay Processes using Optimization Procedures. Journal of Control, Automation and Electrical Systems, 2021, 32, 1563-1577.	2.0	0
5	An Approach to Model Validation for Model Predictive Control Based on Dvurecenska's Metric. Lecture Notes in Electrical Engineering, 2021, , 104-113.	0.4	0
6	Enabling Invariant Models to Describe Time-Varying Dynamics: A Case Study. IFAC-PapersOnLine, 2021, 54, 1-6.	0.9	0
7	Parameter estimation and performance comparison of friction models for pneumatic valves. Control Engineering Practice, 2020, 104, 104629.	5.5	5
8	Embedded Sliding Mode Controller Applied to Control Valves with High Friction. Journal of Control, Automation and Electrical Systems, 2019, 30, 677-687.	2.0	3
9	Revision of the Asymptotic Method and the Error Bound Validation. IFAC-PapersOnLine, 2019, 52, 196-201.	0.9	1
10	Predictive Controller Applied to a pH Neutralization Process. IFAC-PapersOnLine, 2019, 52, 202-206.	0.9	9
11	Stribeck Parameters Estimation of a Diaphragm Valve Using Quasi Newton Method. IFAC-PapersOnLine, 2019, 52, 225-230.	0.9	3
12	Identification of the Dynamic Model of a Petrochemical Furnace of 50MW for Implementation of MPC Control. IFAC-PapersOnLine, 2019, 52, 317-322.	0.9	2
13	Proposal of an Optimal Multi-Objective Technique for I/O Pairing and Multi-loop Tuning of Independent Controllers. IFAC-PapersOnLine, 2019, 52, 958-963.	0.9	0
14	MPC relevant identification method for Hammerstein and Wiener models. Journal of Process Control, 2019, 80, 78-88.	3.3	19
15	Comparison of Statistical Metrics and a New Fuzzy Method for Validating Linear Models Used in Model Predictive Control Controllers. Industrial & Engineering Chemistry Research, 2018, 57, 3666-3677.	3.7	3
16	Friction Compensation in Pneumatic Control Valves Through Feedback Linearization. Journal of Control, Automation and Electrical Systems, 2018, 29, 303-317.	2.0	6
17	Input-Output pairs detection in a distillation column operating in closed-loop. IFAC-PapersOnLine, 2018, 51, 205-210.	0.9	3
18	Implementation of KPIs for Analyzing Control Loop Performance by using PI System of the OSIsoft Enterprise. IEEE Latin America Transactions, 2018, 16, 59-65.	1.6	3

#	ARTICLE	IF	CITATIONS
19	An Innovative Approach for Optimal Time Delay Estimation in System Identification. Journal of Control, Automation and Electrical Systems, 2017, 28, 429-443.	2.0	4
20	Damping Improvement of a F-16 Aircraft through Linear Matrix Inequalities. IFAC-PapersOnLine, 2017, 50, 3947-3952.	0.9	3
21	Detection of no-model input-output pairs in closed-loop systems. ISA Transactions, 2017, 71, 317-327.	5.7	4
22	Plantwide Control: A Review of Design Techniques, Benchmarks, and Challenges. Industrial & Engineering Chemistry Research, 2017, 56, 7877-7887.	3.7	11
23	Friction compensation in control valves: Nonlinear control and usual approaches. Control Engineering Practice, 2017, 58, 42-53.	5.5	21
24	MPC Relevant Identification Method for Hammerstein Models. IFAC-PapersOnLine, 2017, 50, 47-52.	0.9	2
25	Applications of an Optimal Multi-Objective Technique for Integrated Control Structure Selection and Tuning. IFAC-PapersOnLine, 2017, 50, 7517-7522.	0.9	1
26	Control of Pneumatic Valves with Friction Using Algebraic Estimators. , 2017, , .		0
27	Long memory components in macroeconomic series: Are we missing something?., 2016, , .		1
28	Detection of decoupled input/output pairs in multivariable systems. ISA Transactions, 2015, 55, 195-207.	5.7	5
29	Structuresâ€™ Influence on Model-Plant Mismatch Detection Methods in MPC Using Partial Correlation. Lecture Notes in Electrical Engineering, 2015, , 61-70.	0.4	0
30	Algorithms and Methods for Identification of Multivariable Plants. Computer Aided Chemical Engineering, 2014, 33, 667-672.	0.5	3
31	Improving performance and stability of MPC relevant identification methods. Control Engineering Practice, 2014, 22, 20-33.	5.5	18
32	Application of the PLSâ€™PH Method for Identifying Polynomial NARX Models. Journal of Control, Automation and Electrical Systems, 2014, 25, 184-194.	2.0	4
33	Detection of no-model input/output combinations in MIMO systems subject to noise and unmeasured disturbances. , 2014, , .		1
34	Comparison of Stiction Compensation Methods Applied to Control Valves. Industrial & Engineering Chemistry Research, 2014, 53, 3974-3984.	3.7	11
35	Detection of No-Model Input/Output Combinations in a Fluid Catalytic Cracking Unit. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 5514-5519.	0.4	1
36	Simulator for a packing and weighing system of granulated powders. ISA Transactions, 2013, 52, 672-683.	5.7	3

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37	Effectiveness of Signal Excitation Design Methods for Identification of Ill-Conditioned and Highly Interactive Processes. Industrial & Engineering Chemistry Research, 2013, 52, 5120-5135.	3.7	5
38	Optimal time delay estimation for system identification. , 2013, , .		3
39	Time Delay: An alternative definition for optimal System Identification. , 2013, , .		1
40	Performance analysis of MPC based on structures subject to no-model input/output combinations. , 2013, , .		1
41	Searching the optimal order for high order models - SISO case. , 2012, , .		6
42	Enhancement in performance and stability of MRI methods. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1484-1489.	0.4	4
43	Effectiveness of signal excitation design methods for ill-conditioned processes identification. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 337-342.	0.4	1
44	Detection of no-model input/output combination in transfer matrix in closed-loop MIMO systems1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 343-348.	0.4	6
45	Improving performance and stability of MRI methods in closed-loop. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 408-413.	0.4	1
46	Automation of Industrial Serial Processes Based on Finite State Machines. Procedia Engineering, 2012, 42, 186-196.	1.2	8
47	Searching the optimal order for high order models - MIMO case. , 2012, , .		4
48	Application of the PLS-PH algorithm for identification of closed-loop systems. , 2011, , .		1
49	Multivariable system identification using an output-injection based parameterization. , 2011, , .		4
50	Valve friction quantification: industrial case studies. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 2779-2784.	0.4	0
51	Valve friction and nonlinear process model closed-loop identification. Journal of Process Control, 2011, 21, 667-677.	3.3	31
52	Valve friction quantification and nonlinear process model identification. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 115-120.	0.4	2
53	Development of Methods for Multiresidue Analysis of Rice Post-Emergence Herbicides in Loam Soil and Their Possible Applications to Soils of Different Composition. Journal of AOAC INTERNATIONAL, 2010, 93, 425-431.	1.5	8
54	Obstacle Detection and Tracking Using Laser 2D. , 2010, , .		9

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55	Valve friction and nonlinear process model closed-loop identification. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 488-493.	0.4	1
56	Subspace closed loop identification using the integration of MOESP and N4SID methods. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 476-481.	0.4	1
57	Comparison of friction models applied to a control valve. Control Engineering Practice, 2008, 16, 1231-1243.	5.5	89
58	Hardware/firmware implementation of a soft sensor using an improved version of a fuzzy identification algorithm. ISA Transactions, 2008, 47, 157-170.	5.7	9
59	KARNOPP FRICTION MODEL IDENTIFICATION FOR A REAL CONTROL VALVE. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 14906-14911.	0.4	18
60	COMPARISON BETWEEN TWO FRICTION MODEL PARAMETER ESTIMATION METHODS APPLIED TO CONTROL VALVES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 303-308.	0.4	2
61	FRICTION MODEL PARAMETER ESTIMATION FOR CONTROL VALVES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 273-278.	0.4	5
62	Desenvolvimento e modelagem de transdutor fotoel�trico destinado a m�quinas cortadeiras para embalagens flex�veis. Controle and Automacao, 2007, 18, 397-409.	0.2	0
63	An Architecture proposal for the Protection System of a PWR Nuclear Plant. IEEE Latin America Transactions, 2006, 4, 399-402.	1.6	0
64	Modeling of FCC using Identification Methods based on Prediction Error and Sub-space. IEEE Latin America Transactions, 2004, 2, 108-113.	1.6	1
65	Resenha do livro: Identifica��o de sistemas din�micos lineares. Controle and Automacao, 2004, 15, 485-486.	0.2	0
66	Natural gas flow computer with open architecture using intelligent instrumentation and field bus. ISA Transactions, 2003, 42, 181-195.	5.7	1
67	PC-based natural gas flow computer using intelligent instrumentation and field bus. Measurement: Journal of the International Measurement Confederation, 2003, 33, 259-271.	5.0	4
68	Multivariable identification of an activated sludge process with subspace-based algorithms. Control Engineering Practice, 2003, 11, 961-969.	5.5	39
69	MPC Control of a Predenitrification Plant Using Linear Subspace Models. Computer Aided Chemical Engineering, 2002, 10, 553-558.	0.5	5
70	Mod�le de r�f�rence pour �valuer diff�rentes strat�gies de contr�le dans des usines de traitement des eaux us�es. Revue Des Sciences De L'Eau, 2002, 15, 543-556.	0.2	1
71	MODEL-BASED PREDICTIVE CONTROL OF A PRE-DENITRIFICATION PLANT: A LINEAR STATE-SPACE MODEL APPROACH. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 429-434.	0.4	8
72	FUZZY IDENTIFICATION OF BIOPROCESSES APPLYING TSK-TYPE MODELS WITH CONSEQUENT PARAMETER ESTIMATION THROUGH ORTHOGONAL ESTIMATOR. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 283-288.	0.4	2

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73	Software sensor for on-line estimation of the microbial activity in activated sludge systems. ISA Transactions, 2002, 41, 127-143.	5.7	30
74	Modelling and Simulation of pH Neutralization Plant Including the Process Instrumentation. , 0, , .		5