

Mãrcio Af Martins

List of Publications by Year in descending order

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papers

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687363
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44
all docs

44
docs citations

44
times ranked

293
citing authors

#	ARTICLE	IF	CITATIONS
1	A PSO-based optimal tuning strategy for constrained multivariable predictive controllers with model uncertainty. ISA Transactions, 2014, 53, 560-567.	5.7	51
2	A robustly stabilizing model predictive control strategy of stable and unstable processes. Automatica, 2016, 67, 132-143.	5.0	31
3	Robust model predictive control of integrating time delay processes. Journal of Process Control, 2013, 23, 917-932.	3.3	29
4	Artificial Intelligence-oriented economic non-linear model predictive control applied to a pressure swing adsorption unit: Syngas purification as a case study. Separation and Purification Technology, 2021, 276, 119333.	7.9	24
5	Robust model predictive control of an industrial partial combustion fluidized-bed catalytic cracking converter. Chemical Engineering Research and Design, 2014, 92, 917-930.	5.6	23
6	Wave resource characterization through in-situ measurement followed by artificial neural networks' modeling. Renewable Energy, 2018, 115, 1055-1066.	8.9	23
7	New objective function for data reconciliation in water balance from industrial processes. Journal of Cleaner Production, 2010, 18, 1184-1189.	9.3	21
8	Optimization of a True Moving Bed unit and determination of its feasible operating region using a novel Sliding Particle Swarm Optimization. Computers and Industrial Engineering, 2019, 135, 368-381.	6.3	17
9	Big Data-Based Optimization of a Pressure Swing Adsorption Unit for Syngas Purification: On Mapping Uncertainties from a Metaheuristic Technique. Industrial & Engineering Chemistry Research, 2020, 59, 14037-14047.	3.7	17
10	Chromatographic studies of n-Propyl Propionate: Adsorption equilibrium, modelling and uncertainties determination. Computers and Chemical Engineering, 2018, 119, 371-382.	3.8	15
11	Artificial Intelligence and Cyber-Physical Systems: A Review and Perspectives for the Future in the Chemical Industry. AI, 2021, 2, 429-443.	3.8	14
12	Generalized expressions of second and third order for the evaluation of standard measurement uncertainty. Measurement: Journal of the International Measurement Confederation, 2011, 44, 1526-1530.	5.0	13
13	Dynamics of a True Moving Bed separation process: Linear model identification and advanced process control. Journal of Chromatography A, 2017, 1504, 112-123.	3.7	13
14	An efficient cooperative-distributed model predictive controller with stability and feasibility guarantees for constrained linear systems. Systems and Control Letters, 2020, 141, 104701.	2.3	13
15	A novel standpoint of Pressure Swing Adsorption processes multi-objective optimization: An approach based on feasible operation region mapping. Chemical Engineering Research and Design, 2022, 178, 590-601.	5.6	12
16	Optimal fragrances formulation using a deep learning neural network architecture: A novel systematic approach. Computers and Chemical Engineering, 2021, 150, 107344.	3.8	11
17	A robustly model predictive control strategy applied in the control of a simulated industrial polyethylene polymerization process. Computers and Chemical Engineering, 2020, 133, 106664.	3.8	9
18	An implementable stabilizing model predictive controller applied to a rotary flexible link: An experimental case study. Control Engineering Practice, 2020, 99, 104396.	5.5	9

#	ARTICLE	IF	CITATIONS
19	From an Optimal Point to an Optimal Region: A Novel Methodology for Optimization of Multimodal Constrained Problems and a Novel Constrained Sliding Particle Swarm Optimization Strategy. Mathematics, 2021, 9, 1808.	2.2	9
20	An Automatic Tuning Method for Model Predictive Control Strategies. Industrial & Engineering Chemistry Research, 2019, 58, 21602-21613.	3.7	8
21	Transient analysis of true/simulated moving bed reactors: A case study on the synthesis of n-Propyl propionate. Computers and Chemical Engineering, 2020, 137, 106820.	3.8	7
22	An Adaptive Infinite Horizon Model Predictive Control Strategy Applied to an ESP-lifted Oil Well System. IFAC-PapersOnLine, 2021, 54, 176-181.	0.9	7
23	Global Approach for Simulated Moving Bed Model Identification: Design of Experiments, Uncertainty Evaluation, and Optimization Strategy Assessment. Industrial & Engineering Chemistry Research, 2021, 60, 7904-7916.	3.7	7
24	From a Pareto Front to Pareto Regions: A Novel Standpoint for Multiobjective Optimization. Mathematics, 2021, 9, 3152.	2.2	7
25	One-layer gradient-based MPC+RTO strategy for unstable processes: a case study of a CSTR system. Brazilian Journal of Chemical Engineering, 2020, 37, 173-188.	1.3	6
26	Bayesian recursive estimation of linear dynamic system states from measurement information. Measurement: Journal of the International Measurement Confederation, 2012, 45, 1558-1563.	5.0	4
27	Improving the centrifugal compressor map through rigorous thermodynamic modeling: An analysis on a natural gas compression station pipeline. Journal of Natural Gas Science and Engineering, 2021, 92, 104006.	4.4	4
28	Stable distributed MPC with zone control and input targets. Computers and Chemical Engineering, 2021, 155, 107507.	3.8	4
29	A long short-term memory based Quasi-Virtual Analyzer for dynamic real-time soft sensing of a Simulated Moving Bed unit. Applied Soft Computing Journal, 2022, 116, 108318.	7.2	4
30	An MPC auto-tuning framework for tracking economic goals of an ESP-lifted oil well. Journal of Petroleum Science and Engineering, 2022, 217, 110867.	4.2	4
31	Comparação entre os métodos linear e não linear para a avaliação da incerteza de medição. Controle and Automação, 2010, 21, 557-576.	0.2	3
32	Uncertainty evaluation for multivariate industrial processes. Computer Aided Chemical Engineering, 2012, , 365-369.	0.5	2
33	A novel Bayesian approach to reliability modeling: The benefits of uncertainty evaluation in the model selection procedure. Quality and Reliability Engineering International, 2018, 34, 1127-1141.	2.3	2
34	Novel Switch Stabilizing Model Predictive Control Strategy Applied in the Control of a Simulated Moving Bed for the Separation of Bi-Naphthol Enantiomers. Industrial & Engineering Chemistry Research, 2020, 59, 1979-1988.	3.7	2
35	A Robust Model Predictive Controller applied to a Pressure Swing Adsorption Process: An Analysis Based on a Linear Model Mismatch. IFAC-PapersOnLine, 2021, 54, 219-224.	0.9	2
36	On application of a zone IHMPC to an ESP-lifted oil well system. , 0, , .		2

#	ARTICLE	IF	CITATIONS
37	An implementable zone NMPC applied to an ESP-lifted oil well system: Handling the lack of measurements with nonlinear state estimator coupling. Journal of Petroleum Science and Engineering, 2022, 216, 110816.	4.2	2
38	Abnormal Operation Tracking through Big-Data-Based Gram-Schmidt Orthogonalization: Production of n-Propyl Propionate in a Simulated Moving-Bed Reactor: A Case Study. Industrial & Engineering Chemistry Research, 2021, 60, 4060-4071.	3.7	1
39	A stabilizing cooperative-distributed gradient-based economic model predictive control strategy for constrained linear systems. Journal of Process Control, 2022, 112, 36-48.	3.3	1
40	Implementable MPC-based surge avoidance nonlinear control strategies for non-ideally modeled natural gas compression systems. Journal of Natural Gas Science and Engineering, 2022, 102, 104573.	4.4	1
41	Métodos clássicos para a avaliação da incerteza de medição em sistemas multivariáveis. Controle and Automacao, 2012, 23, 430-438.	0.2	0
42	Infinite horizon MPC applied to an industrial FCC converter. , 2013, , .		0
43	Understanding the behavior of an effluent generation indicator throughout uncertainty analysis. Applied Water Science, 2020, 10, 1.	5.6	0
44	A One-Layer Stabilizing Model Predictive Control Strategy of Integrating Systems with Repeated Poles. Journal of Control, Automation and Electrical Systems, 2022, 33, 369-381.	2.0	0