Jorge Mario GÃ³mez

List of Publications by Year
in descending order

23 papers	351 citations	932766 10 h-index	794141 19 g-index
23 all docs	23 docs citations	23 times ranked	313 citing authors

#	Article	IF	Citations
1	Control of an extractive distillation process to dehydrate ethanol using glycerol as entrainer. Computers and Chemical Engineering, 2012, 39, 129-142.	2.0	116
2	A Mixed Integer Nonlinear Programming Formulation for Optimal Design of a Catalytic Distillation Column Based on a Generic Nonequilibrium Model. Industrial & Engineering Chemistry Research, 2006, 45, 1373-1388.	1.8	32
3	Optimal control of single stage LiBr/water absorption chiller. International Journal of Refrigeration, 2018, 92, 1-9.	1.8	26
4	Simultaneous Design and Control of Catalytic Distillation Columns Using Comprehensive Rigorous Dynamic Models. Industrial & Engineering Chemistry Research, 2018, 57, 2587-2608.	1.8	23
5	Integrated design of emulsified cosmetic products: A review. Chemical Engineering Research and Design, 2020, 161, 279-303.	2.7	22
6	Optimal synthesis and design of catalytic distillation columns: A rate-based modeling approach. Chemical Engineering Science, 2021, 231, 116294.	1.9	14
7	Optimal Control of the Extractive Distillation for the Production of Fuel-Grade Ethanol. Industrial & Engineering Chemistry Research, 2013, 52, 8471-8487.	1.8	13
8	An Algorithm for Tuning NMPC Controllers with Application to Chemical Processes. Industrial & Engineering Chemistry Research, 2016, 55, 9215-9228.	1.8	13
9	Optimal design of superstructures for placing units and streams with multiple and ordered available locations. Part II: Rigorous design of catalytic distillation columns. Computers and Chemical Engineering, 2020, 139, 106845.	2.0	12
10	Influence of agricultural activities in the structure and metabolic functionality of paramo soil samples in Colombia studied using a metagenomics analysis in dynamic state. Ecological Modelling, 2017, 351, 63-76.	1.2	11
11	Simultaneous Optimal Design and Control of an Extractive Distillation System for the Production of Fuel Grade Ethanol Using a Mathematical Program with Complementarity Constraints. Industrial & Engineering Chemistry Research, 2014, 53, 752-764.	1.8	9
12	Optimization proposal for emulsions formulation considering a multiscale approach. Chemical Engineering Science, 2020, 212, 115326.	1.9	9
13	A multiscale approach for the integrated design of emulsified cosmetic products. Chemical Engineering Science, 2022, 251, 117493.	1.9	9
14	Optimal design of superstructures for placing units and streams with multiple and ordered available locations. Part I: A new mathematical framework. Computers and Chemical Engineering, 2020, 137, 106794.	2.0	8
15	Trends and perspectives on emulsified product design. Current Opinion in Chemical Engineering, 2022, 35, 100745.	3.8	8
16	Modeling and optimization of a crude distillation unit: A case study for undergraduate students. Computer Applications in Engineering Education, 2013, 21, 276-286.	2.2	7
17	Simultaneous optimal design and operation of a diabatic extractive distillation column based on exergy analysis. International Journal of Exergy, 2015, 17, 287.	0.2	6
18	Framework in PYOMO for the assessment and implementation of (as)NMPC controllers. Computers and Chemical Engineering, 2016, 92, 93-111.	2.0	4

#	Article	IF	Citations
19	Economic Oriented NMPC for an Extractive Distillation Column Using an Index Hybrid DAE Model Based on Fundamental Principles. Industrial & Engineering Chemistry Research, 2015, 54, 6344-6354.	1.8	3
20	Optimal waterflooding management using an embedded predictive analytical model. Journal of Petroleum Science and Engineering, 2022, 208, 109419.	2.1	3
21	Index Hybrid Differentialâ€"Algebraic Equations Model Based on Fundamental Principles for Nonlinear Model Predictive Control of a Flash Separation Drum. Industrial & Engineering Chemistry Research, 2015, 54, 2145-2155.	1.8	2
22	Development of an integrating systems metabolic engineering and bioprocess modeling approach for rational strain improvement. Biochemical Engineering Journal, 2022, 178, 108268.	1.8	1
23	A â€œMINLPâ€•formulation for optimal design of a catalytic distillation column based on a generic non equilibrium model. Computer Aided Chemical Engineering, 2005, 20, 925-930.	0.3	0