Antonio Flores-Tlacuahuac

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/1410359/antonio-flores-tlacuahuac-publications-by-year.pdf
Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

104 papers	1,836 citations	25 h-index	37 g-index
105 ext. papers	2,108 ext. citations	4.3 avg, IF	5.33 L-index

#	Paper	IF	Citations
104	Marginalization index as social measure for Acetone-Butanol-Ethanol supply chain planning. *Renewable and Sustainable Energy Reviews*, **2022**, 154, 111816	16.2	1
103	Optimal computer-aided molecular design of ionic liquid mixtures for post-combustion carbon dioxide capture. *Computers and Chemical Engineering*, **2022**, 157, 107622	4	1
102	Residual Biomass Use for Energy Generation. *Strategies for Sustainability*, **2022**, 237-270	0.8	
101	A MINLP approach to improve heat transfer in flat plates through the optimal distribution of nanoparticles. *Computers and Chemical Engineering*, **2021**, 152, 107389	4	1
100	Computer aided molecular design coupled with molecular dynamics as a novel approach to design new lubricants. *Computers and Chemical Engineering*, **2021**, 156, 107523	4	0
99	Improving molecular design through a machine learning approach. *Chemical Engineering and Processing: Process Intensification*, **2020**, 158, 108173	3.7	1
98	A Lagrangean decomposition optimization approach for long-term planning, scheduling and control. *Computers and Chemical Engineering*, **2020**, 135, 106713	4	4
97	Optimization of the amines-CO2 capture process by a nonequilibrium rate-based modeling approach. *AICHE Journal*, **2020**, 66, e16978	3.6	7
96	An indirect approach for singular optimal control problems. *Computers and Chemical Engineering*, **2020**, 139, 106923	4	7
95	GIS-based modeling of residual biomass availability for energy and production in Mexico. *Renewable and Sustainable Energy Reviews*, **2020**, 120, 109610	16.2	18
94	Robust model predictive control for a nanofluid based solar thermal power plant. *Journal of Process Control*, **2020**, 94, 97-109	3.9	2
93	Optimal design of the water-energy-food nexus for rural communities. *Computers and Chemical Engineering*, **2020**, 143, 107120	4	7
92	Design of domestic photovoltaics manufacturing systems under global constraints and uncertainty. *Renewable Energy*, **2020**, 148, 1174-1189	8.1	5
91	Optimal configuration of metallic nanoparticles to maximize heat transfer in a 2D square plate. *IFAC-PapersOnLine*, **2019**, 52, 207-211	0.7	2
90	Sequential Use of Geographic Information System and Mathematical Programming for Optimal Planning for Energy Production Systems from Residual Biomass. *Industrial & Engineering Chemistry Research*, **2019**, 58, 15818-15837	3.9	10
89	Integrated utility pricing and design of water-energy rural off-grid systems. *Energy*, **2019**, 177, 511-529	7.9	11
88	Water-Energy Off-Grid Systems Design Using a Dominant Stakeholder Approach. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 8554-8578	8.3	4

87	110th Anniversary: Modeling National Power Flow Systems through the Energy Hub Approach. *Industrial & Engineering Chemistry Research*, **2019**, 58, 14252-14266	3.9	2
86	Optimal Start-up Policies for a Nanofluid-Based Solar Thermal Power Plant. *Industrial & Engineering Chemistry Research*, **2019**, 58, 19135-19148	3.9	6
85	Design of Photovoltaics-Based Manufacturing System Using Computer-Aided Design **2019**, 75-88		
84	Novel Approach for Weighting in the Geographic Information System Focused on a Multistakeholder Problem: Case for the Residual Biomass Processing System. *Industrial & Engineering Chemistry Research*, **2019**, 58, 23249-23260	3.9	1
83	Optimal sustainable water-Energy storage strategies for off-grid systems in low-income communities. *Computers and Chemical Engineering*, **2019**, 123, 87-109	4	9
82	An efficient direct/indirect transcription approach for singular optimal control. *AICHE Journal*, **2019** , 65, 937-946	3.6	8
81	A multi-scenario nonlinear model predictive control approach for robust product transitions. *Canadian Journal of Chemical Engineering*, **2019**, 97, 165-177	2.3	3
80	Facilities Location for Residual Biomass Production System Using Geographic Information System under Uncertainty. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 3331-3348	8.3	10
79	Sustainable silicon photovoltaics manufacturing in a global market: A techno-economic, tariff and transportation framework. *Applied Energy*, **2018**, 212, 704-719	10.7	11
78	Optimal Start-Up Policies for a Solar Thermal Power Plant. *Industrial & Engineering Chemistry Research*, **2018**, 57, 1026-1038	3.9	8
77	Optimal Molecular Design of Low-Temperature Organic Fluids under Uncertain Conditions. *Industrial & Engineering Chemistry Research*, **2018**, 57, 5058-5069	3.9	3
76	Dynamic optimization of a cryogenic air separation unit using a derivative-free optimization approach. *Computers and Chemical Engineering*, **2018**, 109, 1-8	4	15
75	Optimal Water Quality Control of Sequencing Batch Reactors Under Uncertainty. *Industrial & Engineering Chemistry Research*, **2018**, 57, 9571-9590	3.9	11
74	A Multistakeholder Approach for the Optimal Planning of Sustainable Energy Systems. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 9451-9460	8.3	9
73	Integration of distributed generation technologies on sustainable buildings. *Applied Energy*, **2018**, 224, 582-601	10.7	18
72	A stochastic optimization approach for the design of organic fluid mixtures for low-temperature heat recovery. *Applied Energy*, **2017**, 198, 145-159	10.7	14
71	Thermo-Economic Multiobjective Optimization of a LOW Temperature Organic Rankine Cycle for Energy Recovery. *Industrial & Engineering Chemistry Research*, **2017**, 56, 11477-11495	3.9	5
70	Dynamic Optimization and Control Strategy for the Planning of a Waste Management System involving Multiple Cities. *Computer Aided Chemical Engineering*, **2017**, 40, 1291-1296	0.6	

69	Robust Optimal Design of Working Fluids for Sustainable Low Temperature Energy Recovery Under Uncertain Conditions. *International Journal of Chemical Reactor Engineering*, **2017**, 15,	1.2	1
68	Dynamic optimization for the planning of a waste management system involving multiple cities. *Journal of Cleaner Production*, **2017**, 165, 190-203	10.3	14
67	An optimization approach for CO2 capture using ionic liquids. *Journal of Cleaner Production*, **2017**, 168, 1652-1667	10.3	36
66	Integral System to Determine Feasible Regions for Biomass Utilization. *Computer Aided Chemical Engineering*, **2017**, 40, 1891-1896	0.6	
65	Optimal model-based aeration control policies in a sequencing batch reactor. *Computers and Chemical Engineering*, **2016**, 85, 124-135	4	6
64	Simultaneous molecular and process design for waste heat recovery. *Energy*, **2016**, 99, 32-47	7.9	18
63	A Computational Framework for Identifiability and Ill-Conditioning Analysis of Lithium-Ion Battery Models. *Industrial & Engineering Chemistry Research*, **2016**, 55, 3026-3042	3.9	20
62	A reactive optimization strategy for the simultaneous planning, scheduling and control of short-period continuous reactors. *Computers and Chemical Engineering*, **2016**, 84, 507-515	4	18
61	A controllability analysis of a pilot-scale CO2 capture plant using ionic liquids. *AICHE Journal*, **2016**, 62, 3298-3309	3.6	13
60	Simultaneous optimal design of multi-stage organic Rankine cycles and working fluid mixtures for low-temperature heat sources. *Computers and Chemical Engineering*, **2016**, 89, 106-126	4	13
59	Product Dynamic Transitions Using a Derivative-Free Optimization Trust-Region Approach. *Industrial & Engineering Chemistry Research*, **2016**, 55, 8586-8601	3.9	6
58	A mixed-integer dynamic optimization approach for the optimal planning of distributed biorefineries. *Computers and Chemical Engineering*, **2015**, 80, 37-62	4	14
57	Simultaneous Optimal Design of Organic Mixtures and Rankine Cycles for Low-Temperature Energy Recovery. *Industrial & Engineering Chemistry Research*, **2015**, 54, 3367-3383	3.9	27
56	Technoeconomic and Dynamical Analysis of a CO2 Capture Pilot-Scale Plant Using Ionic Liquids. *Industrial & Engineering Chemistry Research*, **2015**, 54, 11360-11370	3.9	35
55	Optimal molecular design of working fluids for sustainable low-temperature energy recovery. *Computers and Chemical Engineering*, **2015**, 72, 334-349	4	44
54	Dynamic Optimization for the Optimal Location of New Industrial Facilities Considering the Sustainability of the Watershed. *Computer Aided Chemical Engineering*, **2015**, 36, 421-450	0.6	
53	Multiobjective Dynamic Optimization of the Cell-Cast Process for Poly(methyl methacrylate). *Industrial & Engineering Chemistry Research*, **2014**, 53, 14351-14365	3.9	4
52	MINLP Formulation for Simultaneous Planning, Scheduling, and Control of Short-Period Single-Unit Processing Systems. *Industrial & Engineering Chemistry Research*, **2014**, 53, 14679-14694	3.9	32

51	A Scheduling and Nonlinear Model Predictive Control Strategy for Continuous Polymerization Reactors. *Macromolecular Reaction Engineering*, **2014**, 8, 347-357	1.5	1
50	Logic-Based Outer-Approximation Algorithm for Solving Discrete-Continuous Dynamic Optimization Problems. *Industrial & Engineering Chemistry Research*, **2014**, 53, 5067-5080	3.9	2
49	Optimization of Fractional Order Dynamic Chemical Processing Systems. *Industrial & Engineering Chemistry Research*, **2014**, 53, 5110-5127	3.9	39
48	Analyzing the effects of comfort relaxation on energy demand flexibility of buildings: A multiobjective optimization approach. *Energy and Buildings*, **2014**, 85, 416-426	7	21
47	A Multiobjective Dynamic Optimization Approach for a Methyl-Methacrylate Plastic Sheet Reactor. *Macromolecular Reaction Engineering*, **2014**, 8, 358-373	1.5	7
46	Multiobjective Optimization Approach for Cellulosic Biomass Pretreatment. *Industrial & Engineering Chemistry Research*, **2013**, 52, 5357-5364	3.9	5
45	Model-Based Experimental Design to Estimate Kinetic Parameters of the Enzymatic Hydrolysis of Lignocellulose. *Industrial & Engineering Chemistry Research*, **2013**, 52, 4834-4850	3.9	12
44	Stability of multiobjective predictive control: A utopia-tracking approach. *Automatica*, **2012**, 48, 2627-2632	3.7	84
43	A Multiobjective Optimization Approach for the Simultaneous Single Line Scheduling and Control of CSTRs. *Industrial & Engineering Chemistry Research*, **2012**, 51, 5881-5890	3.9	18
42	Multiobjective Nonlinear Model Predictive Control of a Class of Chemical Reactors. *Industrial & Engineering Chemistry Research*, **2012**, 51, 5891-5899	3.9	30
41	Simultaneous Optimal Design of an Extractive Column and Ionic Liquid for the Separation of Bioethanol/Water Mixtures. *Industrial & Engineering Chemistry Research*, **2012**, 51, 5866-5880	3.9	41
40	Efficient numerical integration of stiff differential equations in polymerisation reaction engineering: Computational aspects and applications. *Canadian Journal of Chemical Engineering*, **2012**, 90, 804-823	2.3	29
39	Optimal Molecular Design of Ionic Liquids for High-Purity Bioethanol Production. *Industrial & Engineering Chemistry Research*, **2011**, 50, 5153-5168	3.9	53
38	Simultaneous Cyclic Scheduling and Control of Tubular Reactors: Parallel Production Lines. *Industrial & Engineering Chemistry Research*, **2011**, 50, 8086-8096	3.9	16
37	Optimal Synthesis of a High Purity Bioethanol Distillation Column Using Ionic Liquids. *Industrial & Engineering Chemistry Research*, **2011**, 50, 5175-5190	3.9	19
36	Modeling, simulation and control of an internally heat integrated pressure-swing distillation process for bioethanol separation. *Computers and Chemical Engineering*, **2011**, 35, 1532-1546	4	66
35	Modeling and simulation of lithium-ion batteries. *Computers and Chemical Engineering*, **2011**, 35, 1937-1948	4	46
34	Optimal Startup/Shutdown Operating Policies with a Recombinant Strain Continuously Stirred Bioreactor. *Industrial & Engineering Chemistry Research*, **2010**, 49, 308-316	3.9	0

33	Simultaneous Cyclic Scheduling and Control of Tubular Reactors: Single Production Lines. *Industrial & Engineering Chemistry Research*, **2010**, 49, 11453-11463	3.9	17
32	Simultaneous Scheduling and Control of Multiproduct Continuous Parallel Lines. *Industrial & Engineering Chemistry Research*, **2010**, 49, 7909-7921	3.9	28
31	Grade Transition Dynamic Optimization of the Living Nitroxide-Mediated Radical Polymerization of Styrene in a Tubular Reactor. *Macromolecular Reaction Engineering*, **2010**, 4, 516-533	1.5	7
30	Returning to Basics: Direct Integration of the Full Molecular-Weight Distribution Equations in Addition Polymerization. *Macromolecular Theory and Simulations*, **2010**, 19, 151-157	1.5	30
29	Dynamic optimization of the methylmethacrylate cell-cast process for plastic sheet production. *AICHE Journal*, **2009**, 55, 1464-1486	3.6	5
28	Bifurcation Behavior of a Large Scale Waste Water Treatment Plant. *Industrial & Engineering Chemistry Research*, **2009**, 48, 2605-2615	3.9	10
27	Integrated Design and Control Using a Simultaneous Mixed-Integer Dynamic Optimization Approach. *Industrial & Engineering Chemistry Research*, **2009**, 48, 1933-1943	3.9	23
26	Lagrangean heuristic for the scheduling and control of polymerization reactors. *AICHE Journal*, **2008**, 54, 163-182	3.6	42
25	Global Optimization of Highly Nonlinear Dynamic Systems. *Industrial & Engineering Chemistry Research*, **2008**, 47, 2643-2655	3.9	33
24	Simultaneous design, scheduling, and optimal control of a methyl-methacrylate continuous polymerization reactor. *AICHE Journal*, **2008**, 54, 3160-3170	3.6	47
23	Integrated control and process design during optimal polymer grade transition operations. *Computers and Chemical Engineering*, **2008**, 32, 2823-2837	4	25
22	Simultaneous cyclic scheduling and optimal control of polymerization reactors. *AICHE Journal*, **2007** , 53, 2301-2315	3.6	63
21	Simultaneous mixed-integer dynamic optimization for integrated design and control. *Computers and Chemical Engineering*, **2007**, 31, 588-600	4	72
20	Interpolated controllers for the robust transition control of a class of reactors. *AICHE Journal*, **2006**, 52, 247-254	3.6	3
19	Optimal Grade Transitions in the High-Impact Polystyrene Polymerization Process. *Industrial & Engineering Chemistry Research*, **2006**, 45, 6175-6189	3.9	30
18	Simultaneous Cyclic Scheduling and Control of a Multiproduct CSTR. *Industrial & Engineering Chemistry Research*, **2006**, 45, 6698-6712	3.9	110
17	Dynamic Modeling and Experimental Validation of the MMA Cell-Cast Process for Plastic Sheet Production. *Industrial & Engineering Chemistry Research*, **2006**, 45, 8539-8553	3.9	9
16	Optimal Operating Policies for the Nitroxide-Mediated Radical Polymerization of Styrene in a Semibatch Reactor. *Industrial & Engineering Chemistry Research*, **2006**, 45, 4637-4652	3.9	13

15	Steady-State Multiplicity Behavior Analysis of a High-Impact Polystyrene Continuous Stirred Tank Reactor Using a Bifunctional Initiator. *Industrial & Engineering Chemistry Research*, **2006**, 45, 1689-1707	3.9	9
14	Non-linear bifurcation analysis of the living nitroxide-mediated radical polymerization of styrene in a CSTR. *Chemical Engineering Science*, **2006**, 61, 370-387	4.4	20
13	The bifurcation behavior of a polyurethane continuous stirred tank reactor. *Chemical Engineering Science*, **2006**, 61, 7368-7385	4.4	10
12	Complex Nonlinear Behavior in the Full-Scale High-Impact Polystyrene Process. *Industrial & Engineering Chemistry Research*, **2005**, 44, 2802-2814	3.9	10
11	Dynamic Optimization of HIPS Open-Loop Unstable Polymerization Reactors. *Industrial & Engineering Chemistry Research*, **2005**, 44, 2659-2674	3.9	65
10	Nonlinear analysis and design of high-impact polymerization reactors using a bifunctional initiator. *Computer Aided Chemical Engineering*, **2005**, 20, 745-750	0.6	
9	Dynamic optimization of a semi-batch reactor for polyurethane production. *Chemical Engineering Science*, **2005**, 60, 3061-3079	4.4	20
8	Grade transition dynamic simulation of HIPS polymerization reactors. *Computers and Chemical Engineering*, **2005**, 30, 357-375	4	8
7	Optimal transition and robust control design for exothermic continuous reactors. *AICHE Journal*, **2005**, 51, 895-908	3.6	13
6	Dynamic modelling, nonlinear parameter fitting and sensitivity analysis of a living free-radical polymerization reactor. *Computer Aided Chemical Engineering*, **2003**, 16, 21-39	0.6	2
5	Modeling of Nonlinear Polyurethane Production in Batch Reactors Using a Kinetic Probabilistic Approach. *Industrial & Engineering Chemistry Research*, **2002**, 41, 5207-5219	3.9	8
4	DETAILED MODELING, SIMULATION, AND PARAMETER ESTIMATION OF NITROXIDE MEDIATED LIVING FREE RADICAL POLYMERIZATION OF STYRENE 1*. *Polymer-Plastics Technology and Engineering*, **2002**, 10, 227-263		48
3	Steady-State Nonlinear Bifurcation Analysis of a High-Impact Polystyrene Continuous Stirred Tank Reactor. *Industrial & Engineering Chemistry Research*, **2000**, 39, 1972-1979	3.9	28
2	Effect of Process Design/Operation on the Steady-State Operability of a Methyl Methacrylate Polymerization Reactor. *Industrial & Engineering Chemistry Research*, **1999**, 38, 4790-4804	3.9	23
1	Effect of process design/operation on the open-loop operability of a polymerization reactor. *Computers and Chemical Engineering*, **1998**, 22, S703-S706	4	