

# Vicente Rico-Ramirez

## List of Publications by Year in descending order

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Version: 2024-02-01

60  
papers

1,072  
citations

394421

19  
h-index

434195

31  
g-index

60  
all docs

60  
docs citations

60  
times ranked

979  
citing authors

#	ARTICLE	IF	CITATIONS
1	A fractional calculus approach to the dynamic optimization of biological reactive systems. Part I: Fractional models for biological reactions. <i>Chemical Engineering Science</i> , 2014, 117, 217-228.	3.8	95
2	Reactive dividing wall distillation columns: Simulation and implementation in a pilot plant. <i>Chemical Engineering and Processing: Process Intensification</i> , 2009, 48, 250-258.	3.6	81
3	MINLP synthesis of heat exchanger networks considering pressure drop effects. <i>Computers and Chemical Engineering</i> , 2003, 27, 1143-1152.	3.8	60
4	Optimum design of Petlyuk and divided-wall distillation systems using a shortcut model. <i>Chemical Engineering Research and Design</i> , 2010, 88, 1405-1418.	5.6	49
5	Feasibility study of a thermally coupled reactive distillation process for biodiesel production. <i>Chemical Engineering and Processing: Process Intensification</i> , 2010, 49, 262-269.	3.6	49
6	Energy-Efficient Designs of Thermally Coupled Distillation Sequences for Four-Component Mixtures. <i>Industrial &amp; Engineering Chemistry Research</i> , 2003, 42, 5157-5164.	3.7	43
7	Water networks security: A two-stage mixed-integer stochastic program for sensor placement under uncertainty. <i>Computers and Chemical Engineering</i> , 2007, 31, 565-573.	3.8	41
8	Design and Optimization of Thermally Coupled Distillation Schemes for the Separation of Multicomponent Mixtures. <i>Industrial &amp; Engineering Chemistry Research</i> , 2006, 45, 724-732.	3.7	40
9	Thermodynamic Analysis of Thermally Coupled Distillation Sequences. <i>Industrial &amp; Engineering Chemistry Research</i> , 2003, 42, 5940-5945.	3.7	39
10	Esterification of fatty acids in a thermally coupled reactive distillation column by the two-step supercritical methanol method. <i>Chemical Engineering Research and Design</i> , 2011, 89, 480-490.	5.6	38
11	Simulation study on biodiesel production by reactive distillation with methanol at high pressure and temperature: Impact on costs and pollutant emissions. <i>Computers and Chemical Engineering</i> , 2013, 52, 204-215.	3.8	38
12	Optimal municipal solid waste energy recovery and management: A mathematical programming approach. <i>Computers and Chemical Engineering</i> , 2018, 119, 394-405.	3.8	37
13	Supplementary Densities and Viscosities of Aqueous Solutions of Diethylene Glycol from (283.15 to) Tj ETQq1 1 0.784314 rgBT /Over 1.9 36		
14	Mixed-integer multiperiod model for the planning of oilfield production. <i>Computers and Chemical Engineering</i> , 2002, 26, 703-714.	3.8	31
15	Stochastic maximum principle for optimal control under uncertainty. <i>Computers and Chemical Engineering</i> , 2004, 28, 2845-2849.	3.8	28
16	A fractional calculus approach to the dynamic optimization of biological reactive systems. Part II: Numerical solution of fractional optimal control problems. <i>Chemical Engineering Science</i> , 2014, 117, 239-247.	3.8	25
17	An MFA optimization approach for pollution trading considering the sustainability of the surrounded watersheds. <i>Computers and Chemical Engineering</i> , 2014, 63, 140-151.	3.8	23
18	Real option theory from finance to batch distillation. <i>Computers and Chemical Engineering</i> , 2003, 27, 1867-1882.	3.8	21

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19	A comparative simulation study of power generation plants involving chemical looping combustion systems. <i>Computers and Chemical Engineering</i> , 2016, 84, 434-445.	3.8	21
20	An integrated stochastic economic-ecological-social model with stratified-population. <i>Ecological Modelling</i> , 2018, 368, 15-26.	2.5	21
21	Selection of food waste with low moisture and high protein content from Mexican restaurants as a supplement to swine feed. <i>Journal of Cleaner Production</i> , 2020, 256, 120137.	9.3	21
22	Gas chromatography/mass spectrometry for the determination of nitrosamines in red wine. <i>Food Chemistry</i> , 2016, 196, 1131-1136.	8.2	19
23	Simplified Methodology for the Design and Optimization of Thermally Coupled Reactive Distillation Systems. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 11717-11730.	3.7	16
24	A Short Note on Control Structures for Thermally Coupled Distillation Sequences for Four-Component Mixtures. <i>Industrial &amp; Engineering Chemistry Research</i> , 2005, 44, 5857-5863.	3.7	14
25	Fisher Information on the Performance of Dynamic Systems. <i>Industrial &amp; Engineering Chemistry Research</i> , 2010, 49, 1812-1821.	3.7	13
26	Analysis of alternative non-catalytic processes for the production of biodiesel fuel. <i>Clean Technologies and Environmental Policy</i> , 2015, 17, 2041-2054.	4.1	13
27	Mixed Integer Nonlinear Programming Model for Sustainable Water Management in Macroscopic Systems: Integrating Optimal Resource Management to the Synthesis of Distributed Treatment Systems. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 2129-2145.	6.7	13
28	Two-Stage Stochastic Approach to the Optimal Location of Booster Disinfection Stations. <i>Industrial &amp; Engineering Chemistry Research</i> , 2007, 46, 6284-6292.	3.7	12
29	A new correlation for the prediction of refractive index and liquid densities of 1-alcohols. <i>Fluid Phase Equilibria</i> , 2015, 387, 117-120.	2.5	12
30	Effect of feedback loops on the sustainability and resilience of human-ecosystems. <i>Ecological Modelling</i> , 2020, 426, 109018.	2.5	11
31	Experimental study on pressure drops in a dividing wall distillation column. <i>Chemical Engineering and Processing: Process Intensification</i> , 2010, 49, 177-182.	3.6	10
32	Improving convergence of the stochastic decomposition algorithm by using an efficient sampling technique. <i>Computers and Chemical Engineering</i> , 2004, 28, 767-773.	3.8	9
33	Simplified Design of Batch Reactive Distillation Columns. <i>Industrial &amp; Engineering Chemistry Research</i> , 2004, 43, 4000-4011.	3.7	9
34	A Mathematical Programming Approach to Pollution Trading. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 5922-5931.	3.7	9
35	Multiple Steady States in Thermally Coupled Distillation Sequences: Revisiting the Design, Energy Optimization, and Control. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 17515-17521.	3.7	9
36	Analysis of Carbon Policies in the Optimal Integration of Power Plants Involving Chemical Looping Combustion with Algal Cultivation Systems. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 5248-5264.	6.7	7

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37	A New Approach to Solving Stochastic Optimal Control Problems. <i>Mathematics</i> , 2019, 7, 1207.	2.2	7
38	Some operational aspects and applications of dividing wall columns: energy requirements and carbon dioxide emissions. <i>Clean Technologies and Environmental Policy</i> , 2015, 17, 657-665.	4.1	6
39	Approximate design method for reactive liquid extractors based on thermodynamic equilibrium correlations. <i>Chemical Engineering Research and Design</i> , 2016, 109, 443-454.	5.6	6
40	Strategic Capacity Allocation under Uncertainty by Using a Two-Stage Stochastic Decomposition Algorithm with Incumbent Solutions. <i>Industrial &amp; Engineering Chemistry Research</i> , 2010, 49, 2812-2821.	3.7	4
41	Sustainability Assessment of an Integrated Economic-Ecologic-Social Model under Time-Dependent Uncertainties. <i>Computer Aided Chemical Engineering</i> , 2017, 40, 577-582.	0.5	4
42	Fisher information calculation in a complex ecological model: An optimal control-based approach. <i>Ecological Modelling</i> , 2020, 416, 108845.	2.5	4
43	Water impact of an optimal natural gas production and distribution system: An MILP model and the case-study of Mexico. <i>Chemical Engineering Research and Design</i> , 2020, 153, 887-906.	5.6	4
44	An MINLP approach to the 3D process layout problem. <i>Chemical Engineering Research and Design</i> , 2021, 165, 137-149.	5.6	4
45	Fisher information: A generalized sustainability index?. <i>Computer Aided Chemical Engineering</i> , 2008, 25, 1155-1160.	0.5	3
46	A Fractional Calculus Application to Biological Reactive Systems. <i>Computer Aided Chemical Engineering</i> , 2012, 30, 1302-1306.	0.5	3
47	Control of falling-film evaporators with modeling of fouling. <i>Food and Bioproducts Processing</i> , 2022, 132, 68-82.	3.6	3
48	Optimal location of booster disinfection stations in a water distribution system: A two-stage stochastic approach. <i>Computer Aided Chemical Engineering</i> , 2007, 24, 231-236.	0.5	2
49	Implementation of a reactive dividing wall distillation column in a pilot plant. <i>Computer Aided Chemical Engineering</i> , 2008, 25, 229-234.	0.5	2
50	A Mixed-Integer Programming Model for Pollution Trading. <i>Computer Aided Chemical Engineering</i> , 2011, 29, 1256-1260.	0.5	2
51	Exergy analysis of a reactive extraction process. <i>Chemical Engineering Research and Design</i> , 2020, 162, 1-11.	5.6	2
52	Primary kinetic isotope effect in the nitrosation of 1,3- dialkylureas. <i>Reaction Kinetics and Catalysis Letters</i> , 2009, 96, 5-12.	0.6	1
53	Optimal water management in macroscopic systems under economic penalty scenarios. <i>AIChE Journal</i> , 2017, 63, 3419-3441.	3.6	1
54	Modeling, simulation and optimization of combined fractional-ordinary dynamic systems. <i>Computers and Chemical Engineering</i> , 2020, 133, 106651.	3.8	1

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55	Using the HSS technique for improving the efficiency of the stochastic decomposition algorithm. Computer Aided Chemical Engineering, 2003, 14, 851-856.	0.5	0
56	Time Dependent Uncertainties and Optimal Control. Computer Aided Chemical Engineering, 2004, 18, 763-768.	0.5	0
57	Stochastic optimal control in batch reactive systems: Developments on engineering applications of real option theory. Computer Aided Chemical Engineering, 2006, 21, 1419-1424.	0.5	0
58	Steric impediment of alkyl groups in the nitrosation of alkylureas. Reaction Kinetics and Catalysis Letters, 2008, 94, 337-344.	0.6	0
59	A Mixed Integer Programming Model for Sustainable Water Management in Macroscopic Systems. Computer Aided Chemical Engineering, 2016, 38, 1839-1844.	0.5	0
60	Analysis of the Production of Methyl Esters by the Two-Step Supercritical Method using Reactive Distillation. Computer Aided Chemical Engineering, 2012, 30, 707-711.	0.5	0