Jose Antonio Caballero

List of Publications by Year in descending order

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181 papers 5,299 citations

41 h-index

70961

102304 66 g-index

181 all docs

181 docs citations

times ranked

181

3688 citing authors

#	Article	IF	CITATIONS
1	Pyrolysis kinetics of almond shells and olive stones considering their organic fractions. Journal of Analytical and Applied Pyrolysis, 1997, 42, 159-175.	2.6	245
2	An algorithm for the use of surrogate models in modular flowsheet optimization. AICHE Journal, 2008, 54, 2633-2650.	1.8	226
3	Analysis of different kinetic models in the dynamic pyrolysis of cellulose. Thermochimica Acta, 1995, 254, 175-192.	1.2	170
4	Characterization of sewage sludges by primary and secondary pyrolysis. Journal of Analytical and Applied Pyrolysis, 1997, 40-41, 433-450.	2.6	142
5	Design of distillation sequences: from conventional to fully thermally coupled distillation systems. Computers and Chemical Engineering, 2004, 28, 2307-2329.	2.0	138
6	Thermogravimetric studies on the thermal decomposition of polyethylene. Journal of Analytical and Applied Pyrolysis, 1996, 36, 1-15.	2.6	134
7	Mathematical programming approaches to the synthesis of chemical process systems. Korean Journal of Chemical Engineering, 1999, 16, 407-426.	1.2	128
8	Comments on the validity and utility of the different methods for kinetic analysis of thermogravimetric data. Journal of Analytical and Applied Pyrolysis, 2001, 58-59, 617-633.	2.6	128
9	Pyrolysis study of polyurethane. Journal of Analytical and Applied Pyrolysis, 2001, 58-59, 63-77.	2.6	105
10	Application of Life Cycle Assessment to the Structural Optimization of Process Flowsheets. Industrial & Samp; Engineering Chemistry Research, 2008, 47, 777-789.	1.8	104
11	Generalized Disjunctive Programming Model for the Optimal Synthesis of Thermally Linked Distillation Columns. Industrial & Engineering Chemistry Research, 2001, 40, 2260-2274.	1.8	100
12	Comparative study of the pyrolysis of almond shells and their fractions, holocellulose and lignin. Product yields and kinetics. Thermochimica Acta, 1996, 276, 57-77.	1.2	94
13	Structural Considerations and Modeling in the Synthesis of Heat-Integratedâ^Thermally Coupled Distillation Sequences. Industrial & Engineering Chemistry Research, 2006, 45, 8454-8474.	1.8	94
14	Kinetic model for the combustion of tyre wastes. Fuel, 1998, 77, 1469-1475.	3.4	93
15	Thermogravimetric analysis of olive stones with sulphuric acid treatment. Journal of Analytical and Applied Pyrolysis, 1997, 44, 75-88.	2.6	90
16	Study of the primary pyrolysis of Kraft lignin at high heating rates: yields and kinetics. Journal of Analytical and Applied Pyrolysis, 1996, 36, 159-178.	2.6	88
17	Pyrolysis of Kraft lignin: yields and correlations. Journal of Analytical and Applied Pyrolysis, 1997, 39, 161-183.	2.6	81
18	Kinetics of the thermal decomposition of tannery waste. Journal of Analytical and Applied Pyrolysis, 1998, 47, 165-181.	2.6	76

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19	Mathematical considerations for nonisothermal kinetics in thermal decomposition. Journal of Analytical and Applied Pyrolysis, 2005, 73, 85-100.	2.6	76
20	Optimization of multi-stage membrane systems for CO 2 capture from flue gas. International Journal of Greenhouse Gas Control, 2016, 53, 371-390.	2.3	76
21	Shale gas flowback water desalination: Single vs multiple-effect evaporation with vapor recompression cycle and thermal integration. Desalination, 2017, 404, 230-248.	4.0	76
22	Optimal heat exchanger network synthesis usingÂparticle swarm optimization. Optimization and Engineering, 2010, 11, 459-470.	1.3	70
23	Design of Hybrid Distillationâ [^] Vapor Membrane Separation Systems. Industrial & Design & Engineering Chemistry Research, 2009, 48, 9151-9162.	1.8	69
24	On the use of Principal Component Analysis for reducing the number of environmental objectives in multi-objective optimization: Application to the design of chemical supply chains. Chemical Engineering Science, 2012, 69, 146-158.	1.9	69
25	Artificial neural network for modelling thermal decompositions. Journal of Analytical and Applied Pyrolysis, 2004, 71, 343-352.	2.6	66
26	Desalination of shale gas produced water: A rigorous design approach for zero-liquid discharge evaporation systems. Journal of Cleaner Production, 2017, 140, 1399-1414.	4.6	66
27	Optimal heat exchanger network synthesis with the detailed heat transfer equipment design. Computers and Chemical Engineering, 2007, 31, 1432-1448.	2.0	65
28	Synthesis of complex thermally coupled distillation systems including divided wall columns. AICHE Journal, 2013, 59, 1139-1159.	1.8	65
29	Optimal synthesis of thermally coupled distillation sequences using a novel MILP approach. Computers and Chemical Engineering, 2014, 61, 118-135.	2.0	65
30	New kinetic model for thermal decomposition of heterogeneous materials. Industrial & https://www.engineering.com/chemistry Research, 1995, 34, 806-812.	1.8	63
31	Multi-objective optimization of environmentally conscious chemical supply chains under demand uncertainty. Chemical Engineering Science, 2013, 95, 1-11.	1.9	62
32	Rigorous design of distillation columns using surrogate models based on <scp>K</scp> riging interpolation. AICHE Journal, 2015, 61, 2169-2187.	1.8	60
33	Rigorous Design of Distillation Columns:  Integration of Disjunctive Programming and Process Simulators. Industrial & Disjunctive Programming Action Process Simulators. Industrial & Disjunctive Programming Action Process Simulators. Industrial & Disjunctive Programming Process Simulators. Industrial & Disjunctive Process Simulators. Industrial & Disjuncti	1.8	59
34	Optimal Design of Shell-and-Tube Heat Exchangers Using Particle Swarm Optimization. Industrial & Engineering Chemistry Research, 2009, 48, 2927-2935.	1.8	56
35	Simultaneous synthesis of heat exchanger networks with pressure recovery: Optimal integration between heat and work. AICHE Journal, 2014, 60, 893-908.	1.8	56
36	Simultaneous synthesis of work exchange networks with heat integration. Chemical Engineering Science, 2014, 112, 87-107.	1.9	56

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37	Flash pyrolysis of Klason lignin in a Pyroprobe 1000. Journal of Analytical and Applied Pyrolysis, 1993, 27, 221-244.	2.6	52
38	Rigorous Design of Complex Distillation Columns Using Process Simulators and the Particle Swarm Optimization Algorithm. Industrial & Engineering Chemistry Research, 2013, 52, 15621-15634.	1.8	51
39	A MINLP Model for the Rigorous Design of Shell and Tube Heat Exchangers Using the Tema Standards. Chemical Engineering Research and Design, 2007, 85, 1423-1435.	2.7	48
40	Aggregated Models for Integrated Distillation Systems. Industrial & Engineering Chemistry Research, 1999, 38, 2330-2344.	1.8	46
41	Kinetic study of the secondary thermal decomposition of Kraft lignin. Journal of Analytical and Applied Pyrolysis, 1996, 38, 131-152.	2.6	43
42	Thermodynamically equivalent configurations for thermally coupled distillation. AICHE Journal, 2003, 49, 2864-2884.	1.8	40
43	Retrofit of heat exchanger networks with pressure recovery of process streams at sub-ambient conditions. Energy Conversion and Management, 2015, 94, 377-393.	4.4	40
44	Kinetic model for the continuous pyrolysis of two types of polyethylene in a fluidized bed reactor. Journal of Analytical and Applied Pyrolysis, 1997, 40-41, 419-431.	2.6	39
45	Systematic approach for the life cycle multi-objective optimization of buildings combining objective reduction and surrogate modeling. Energy and Buildings, 2016, 130, 506-518.	3.1	38
46	Logic hybrid simulation-optimization algorithm for distillation design. Computers and Chemical Engineering, 2015, 72, 284-299.	2.0	36
47	An alternative disjunctive optimization model for heat integration with variable temperatures. Computers and Chemical Engineering, 2013, 56, 12-26.	2.0	35
48	Flowsheet optimization with complex cost and size functions using process simulators. AICHE Journal, 2007, 53, 2351-2366.	1.8	34
49	Strategies for the robust simulation of thermally coupled distillation sequences. Computers and Chemical Engineering, 2012, 36, 149-159.	2.0	34
50	A new technique for recovering energy in thermally coupled distillation using vapor recompression cycles. AICHE Journal, 2013, 59, 3767-3781.	1.8	34
51	Optimal Pretreatment System of Flowback Water from Shale Gas Production. Industrial & Description of Flowback Water from Shale Gas Production. Industrial & Description of Flowback Water from Shale Gas Production. Industrial & Description of Flowback Water from Shale Gas Production. Industrial & Description of Flowback Water from Shale Gas Production. Industrial & Description of Flowback Water from Shale Gas Production. Industrial & Description of Flowback Water from Shale Gas Production. Industrial & Description of Flowback Water from Shale Gas Production. Industrial & Description of Flowback Water from Shale Gas Production. Industrial & Description of Flowback Water from Shale Gas Production. Industrial & Description of Flowback Water from Shale Gas Production. Industrial & Description of Flowback Water from Shale Gas Production. Industrial & Description of Flowback Water from Shale Gas Production. Industrial & Description of Flowback Water from Shale Gas Production of Flowb	1.8	34
52	Optimization of multistage membrane distillation system for treating shale gas produced water. Desalination, 2019, 460, 15-27.	4.0	32
53	Process optimization for zero-liquid discharge desalination of shale gas flowback water under uncertainty. Journal of Cleaner Production, 2017, 164, 1219-1238.	4.6	31
54	Large scale optimization of a sour water stripping plant using surrogate models. Computers and Chemical Engineering, 2016, 92, 143-162.	2.0	30

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55	Delaying carbon dioxide removal in the European Union puts climate targets at risk. Nature Communications, 2021, 12, 6490.	5.8	30
56	Hybrid simulation-optimization based approach for the optimal design of single-product biotechnological processes. Computers and Chemical Engineering, 2012, 37, 125-135.	2.0	29
57	Multi-objective synthesis of work and heat exchange networks: Optimal balance between economic and environmental performance. Energy Conversion and Management, 2017, 140, 192-202.	4.4	29
58	Systematic Tools for the Conceptual Design of Inherently Safer Chemical Processes. Industrial & Samp; Engineering Chemistry Research, 2017, 56, 7301-7313.	1.8	28
59	Evolution of gases from the pyrolysis of modified almond shells: effect of impregnation with CoCl2. Journal of Analytical and Applied Pyrolysis, 1997, 43, 59-69.	2.6	27
60	Mathematical programming model for heat exchanger design through optimization of partial objectives. Energy Conversion and Management, 2013, 74, 60-69.	4.4	27
61	A novel disjunctive model for the simultaneous optimization and heat integration. Computers and Chemical Engineering, 2017, 96, 149-168.	2.0	27
62	Optimization of the design, operating conditions, and coupling configuration of combined cycle power plants and CO2 capture processes by minimizing the mitigation cost. Chemical Engineering Journal, 2018, 331, 870-894.	6.6	27
63	Pyrolytic products from tannery wastes. Journal of Analytical and Applied Pyrolysis, 1999, 49, 243-256.	2.6	26
64	Kinetic models for the thermal degradation of heterogeneous materials. Journal of Analytical and Applied Pyrolysis, 1995, 32, 29-39.	2.6	25
65	Integration of modular process simulators under the Generalized Disjunctive Programming framework for the structural flowsheet optimization. Computers and Chemical Engineering, 2014, 67, 13-25.	2.0	25
66	Optimal synthesis of work and heat exchangers networks considering unclassified process streams at sub and above-ambient conditions. Applied Energy, 2018, 224, 567-581.	5.1	25
67	Comparison between the pyrolysis products obtained from different organic wastes at high temperatures. Journal of Analytical and Applied Pyrolysis, 1995, 32, 41-49.	2.6	22
68	MINLP-based Analytic Hierarchy Process to simplify multi-objective problems: Application to the design of biofuels supply chains using on field surveys. Computers and Chemical Engineering, 2017, 102, 64-80.	2.0	22
69	Membrane-Based Processes: Optimization of Hydrogen Separation by Minimization of Power, Membrane Area, and Cost. Processes, 2018, 6, 221.	1.3	22
70	Holistic Planning Model for Sustainable Water Management in the Shale Gas Industry. Industrial & Lamp; Engineering Chemistry Research, 2018, 57, 13131-13143.	1.8	22
71	Optimal synthesis of multiperiod heat exchanger networks: A sequential approach. Applied Thermal Engineering, 2017, 115, 1187-1202.	3.0	21
72	Hybrid simulation-equation based synthesis of chemical processes. Chemical Engineering Research and Design, 2018, 132, 766-784.	2.7	21

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7 3	Synthesis and optimization of membrane cascade for gas separation via mixedâ€integer nonlinear programming. AICHE Journal, 2017, 63, 1989-2006.	1.8	20
74	Multi-objective optimization of combined synthesis gas reforming technologies. Journal of CO2 Utilization, 2017, 22, 355-373.	3.3	20
75	Water distribution networks optimization considering unknown flow directions and pipe diameters. Computers and Chemical Engineering, 2019, 127, 41-48.	2.0	20
76	Synthesis and optimization of work and heat exchange networks using an MINLP model with a reduced number of decision variables. Applied Energy, 2020, 262, 114441.	5.1	20
77	Simultaneous environmental and economic process synthesis of isobutane alkylation. Journal of Cleaner Production, 2014, 81, 270-280.	4.6	19
78	Integration of different models in the design of chemical processes: Application to the design of a power plant. Applied Energy, 2014, 124, 256-273.	5.1	19
79	Multiobjective Early Design of Complex Distillation Sequences Considering Economic and Inherent Safety Criteria. Industrial & Engineering Chemistry Research, 2018, 57, 6992-7007.	1.8	19
80	Disjunctive model for the simultaneous optimization and heat integration with unclassified streams and area estimation. Computers and Chemical Engineering, 2018, 108, 217-231.	2.0	19
81	Optimal carbon dioxide and hydrogen utilization in carbon monoxide production. Journal of CO2 Utilization, 2019, 34, 215-230.	3 . 3	18
82	Kaibel column: Modeling, optimization, and conceptual design of multi-product dividing wall columns. Computers and Chemical Engineering, 2019, 125, 31-39.	2.0	18
83	Economic and Environmental Assessment of Alternatives to the Extraction of Acetic Acid from Water. Industrial & Engineering Chemistry Research, 2011, 50, 10717-10729.	1.8	17
84	New approach to thermal analysis kinetics by considering several first order reactions. Thermochimica Acta, 2011, 525, 40-49.	1.2	17
85	Heat Exchanger Network Optimization for Multiple Period Operations. Industrial & Description (2016, 55, 10301-10315).	1.8	17
86	Environmental and Economic Water Management in Shale Gas Extraction. Sustainability, 2020, 12, 1686.	1.6	17
87	Alternative carbon dioxide utilization in dimethyl carbonate synthesis and comparison with current technologies. Journal of CO2 Utilization, 2021, 45, 101436.	3.3	15
88	Application of life cycle assessment to the structural optimization of process flowsheets. Computer Aided Chemical Engineering, 2007, , 1163-1168.	0.3	14
89	A pinch-based method for defining pressure manipulation routes in work and heat exchange networks. Renewable and Sustainable Energy Reviews, 2020, 131, 109989.	8.2	14
90	MILP method for objective reduction in multi-objective optimization. Computers and Chemical Engineering, 2018, 108, 382-394.	2.0	13

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91	Thermo-economic and environmental optimization of a solar-driven zero-liquid discharge system for shale gas wastewater desalination. Desalination, 2021, 511, 115098.	4.0	13
92	Influence of potassium loading at different reaction temperatures on the NOx reduction process by potassium-containing coal pelletsa~†. Fuel, 2003, 82, 267-274.	3.4	12
93	A cooperative game strategy for designing sustainable supply chains under the emissions trading system. Journal of Cleaner Production, 2021, 285, 124845.	4.6	12
94	Optimization of water distribution networks using a deterministic approach. Engineering Optimization, 2021, 53, 107-124.	1.5	12
95	Kriging-assisted constrained optimization of single-mixed refrigerant natural gas liquefaction process. Chemical Engineering Science, 2021, 241, 116699.	1.9	12
96	Development of a Kinetic Model for the NOxReduction Process by Potassium-Containing Coal Pellets. Environmental Science & Envi	4.6	11
97	Kinetic study of the pyrolysis of neoprene. Journal of Analytical and Applied Pyrolysis, 2005, 74, 231-237.	2.6	11
98	Optimization of Chemical Processes Using Surrogate Models Based on a Kriging Interpolation. Computer Aided Chemical Engineering, 2015, , 179-184.	0.3	11
99	Multi-objective Optimization of a Carbon Dioxide Utilization Superstructure for the Synthesis of Formic and Acetic Acid. Computer Aided Chemical Engineering, 2018, 43, 1419-1424.	0.3	11
100	OFISI, a novel optimizable inherent safety index based on fuzzy logic. Computers and Chemical Engineering, 2019, 129, 106526.	2.0	11
101	A Novel Sequential Approach for the Design of Heat Exchanger Networks. Frontiers in Chemical Engineering, 2021, 3, .	1.3	11
102	Rigorous flowsheet optimization using process simulators and surrogate models. Computer Aided Chemical Engineering, 2008, 25, 551-556.	0.3	10
103	Optimization of Distillation Processes. , 2014, , 437-496.		10
104	Economic and environmental strategic water management in the shale gas industry: Application of cooperative game theory. AICHE Journal, 2019, 65, e16725.	1.8	10
105	Disjunctive-Genetic Programming Approach to Synthesis of Process Networks. Industrial & Disjunctive-Genetic Programming Approach to Synthesis of Process Networks. Industrial & Disjunctive-Genetic Programming Approach to Synthesis of Process Networks. Industrial & Disjunctive-Genetic Programming Approach to Synthesis of Process Networks. Industrial & Disjunctive-Genetic Programming Approach to Synthesis of Process Networks. Industrial & Disjunctive-Genetic Programming Approach to Synthesis of Process Networks. Industrial & Disjunctive-Genetic Programming Approach to Synthesis of Process Networks. Industrial & Disjunctive-Genetic Process Networks.	1.8	9
106	MINLP Model for the Synthesis of Heat Exchanger Networks with Handling Pressure of Process Streams. Computer Aided Chemical Engineering, 2014, 33, 163-168.	0.3	9
107	Analysis of the Reaction Conditions in the NOxReduction Process by Carbon with a View to Achieve High NOxConversions. Residence Time Considerations. Energy & Samp; Fuels, 2002, 16, 1425-1428.	2.5	8
108	Logic-Based Methods for Generating and Optimizing Thermally Coupled Distillation Systems. Computer Aided Chemical Engineering, 2002, 10, 169-174.	0.3	8

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109	Una revisi \tilde{A}^3 n del estado del arte en optimizaci \tilde{A}^3 n. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2007, 4, 5-23.	0.6	8
110	Teaching mathematical modeling software for multiobjective optimization in chemical engineering courses. Education for Chemical Engineers, 2012, 7, e169-e180.	2.8	8
111	How to implement environmental considerations in chemical process design: An approach to multiobjective optimization for undergraduate students. Education for Chemical Engineers, 2012, 7, e56-e67.	2.8	8
112	MINLP Optimization Algorithm for the Synthesis of Heat and Work Exchange Networks. Computer Aided Chemical Engineering, 2014, , 115-120.	0.3	8
113	Multistage Membrane Distillation for the Treatment of Shale Gas Flowback Water: Multi-Objective Optimization under Uncertainty. Computer Aided Chemical Engineering, 2017, 40, 571-576.	0.3	8
114	Revisiting Classic Acetic Acid Synthesis: Optimal Hydrogen Consumption and Carbon Dioxide Utilization. Computer Aided Chemical Engineering, 2019, 46, 145-150.	0.3	8
115	Simulation-based optimization of distillation processes using an extended cutting plane algorithm. Computers and Chemical Engineering, 2022, 159, 107655.	2.0	8
116	Kinetic model for the NOx reduction process by potassium containing coal char pellets at moderate temperature (350–450 °C) in the presence of O2 and H2O. Fuel Processing Technology, 2006, 87, 429-436.	3.7	7
117	Thermally Coupled Distillation. Computer Aided Chemical Engineering, 2009, 27, 59-64.	0.3	7
118	Optimal Design of a Hybrid Membrane System Combining Reverse and Forward Osmosis for Seawater Desalination. Computer Aided Chemical Engineering, 2014, , 1399-1404.	0.3	6
119	Multi-objective Optimization of a Methanol Synthesis Process Superstructure with Two-step Carbon Dioxide Consumption. Computer Aided Chemical Engineering, 2017, 40, 721-726.	0.3	6
120	Multi-Objective Optimization of Renewable Energy-Driven Desalination Systems. Computer Aided Chemical Engineering, 2017, , 499-504.	0.3	6
121	Optimal Design of a Two-Stage Membrane System for Hydrogen Separation in Refining Processes. Processes, 2018, 6, 208.	1.3	6
122	Multiperiod work and heat integration. Energy Conversion and Management, 2021, 227, 113587.	4.4	6
123	Structural considerations in zeotropic distillation sequences with multiple feeds. Computers and Chemical Engineering, 2021, 154, 107475.	2.0	6
124	Incorporating CO2 emission trading in the optimal design and planning of chemical supply chain networks under uncertainty. Computer Aided Chemical Engineering, 2012, 30, 127-131.	0.3	5
125	Optimization of a Sour Water Stripping Plant Using Surrogate Models. Computer Aided Chemical Engineering, 2016, 38, 31-36.	0.3	5
126	Combining Forward and Reverse Osmosis for Shale Gas Wastewater Treatment to Minimize Cost and Freshwater Consumption. Computer Aided Chemical Engineering, 2017, 40, 2725-2730.	0.3	5

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127	Optimal Shale Gas Flowback Water Desalination under Correlated Data Uncertainty. Computer Aided Chemical Engineering, 2017, , 943-948.	0.3	5
128	MILP models for objective reduction in multi-objective optimization: Error measurement considerations and non-redundancy ratio. Computers and Chemical Engineering, 2018, 115, 323-332.	2.0	5
129	An extended method for work and heat integration considering practical operating constraints. Energy Conversion and Management, 2020, 206, 112469.	4.4	5
130	An aggregated MINLP optimization model for synthesizing azeotropic distillation systems. Computers and Chemical Engineering, 1999, 23, S85-S88.	2.0	4
131	Rigorous Design of Complex Liquid-Liquid Multi-Staged Extractors Combining Mathematical Programming and Process Simulators. Computer Aided Chemical Engineering, 2009, , 981-986.	0.3	4
132	Hybrid Simulation-Optimization Algorithms for Distillation Design. Computer Aided Chemical Engineering, 2010, , 637-642.	0.3	4
133	Mathematical Programming Approach for the Design of Intensified Thermally Coupled Distillation Sequences Computer Aided Chemical Engineering, 2016, , 355-360.	0.3	4
134	Dimethyl Carbonate Production Process from Urea and Methanol. Computer Aided Chemical Engineering, 2018, 43, 731-736.	0.3	4
135	Desalination of shale gas wastewater: Thermal and membrane applications for zero-liquid discharge. , 2018, , 399-431.		4
136	Economic Study of the Urea Alcoholysis Process for Dimethyl Carbonate Production. Computer Aided Chemical Engineering, 2019, 46, 439-444.	0.3	4
137	Design and optimization of energy-efficient single mixed refrigerant LNG liquefaction process. Brazilian Journal of Chemical Engineering, 2021, 38, 669-682.	0.7	4
138	Logic-Sequential Approach to the Synthesis of Complex Thermally Coupled Distillation Systems Computer Aided Chemical Engineering, 2011, , 211-215.	0.3	4
139	Minimizing the total annualized cost of "SIDEM―seawater desalination unit. , 0, 115, 181-193.		4
140	Synthesis of integrated distillation systems. Computer Aided Chemical Engineering, 2003, , 59-64.	0.3	3
141	A Novel Hybrid Simulation-Optimization Approach for the Optimal Design of Multicomponent Distillation Columns. Computer Aided Chemical Engineering, 2012, 30, 1257-1261.	0.3	3
142	A generalized disjunctive programming framework for the optimal synthesis and analysis of processes for ethanol production from corn stover. Bioresource Technology, 2017, 236, 212-224.	4.8	3
143	Membrane Desalination in Shale Gas Industry. , 2019, , 243-267.		3
144	Integrating environmental concerns into the teaching of mathematical optimization. Education for Chemical Engineers, 2020, 32, 40-49.	2.8	3

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145	Mixed integer non-linear programming model for reliable and safer design at an early stage. Computers and Chemical Engineering, 2021, 147, 107256.	2.0	3
146	Study of the rheological properties of the paste during the phase inversion in the manufacturing process of Xixona turron. Journal of Food Engineering, 1995, 26, 231-241.	2.7	2
147	Optimal synthesis of distillation columns: Integration of process simulators in a disjunctive programming environment. Computer Aided Chemical Engineering, 2005, , 715-720.	0.3	2
148	Integration of generalized disjunctive programming with modular process simulators. Computer Aided Chemical Engineering, 2006, , 125-130.	0.3	2
149	Minimization of the life cycle impact of chemical supply chain networks under demand uncertainty. Computer Aided Chemical Engineering, 2011, 29, 1195-1199.	0.3	2
150	Handling of Uncertainty in Life Cycle Inventory by Correlated Multivariate Lognormal Distributions: Application to the Design of Supply Chain Networks. Computer Aided Chemical Engineering, 2014, 33, 1075-1080.	0.3	2
151	Systematic Methods for Inherently Safer Process Design: Comparison among Inherent Safety Indexes by Dimensionality Reduction. Computer Aided Chemical Engineering, 2017, , 1237-1242.	0.3	2
152	Sustainable Optimal Strategic Planning for Shale Water Management. Computer Aided Chemical Engineering, 2018, , 657-662.	0.3	2
153	Simulation-Based Optimization of Chemical Processes Using the Extended Cutting Plane Algorithm. Computer Aided Chemical Engineering, 2018, , 463-469.	0.3	2
154	A Novel Optimizable Inherent Safety Index Based on Fuzzy Logic. Computer Aided Chemical Engineering, 2019, 46, 559-564.	0.3	2
155	Water Distribution Network Optimization Considering Uncertainties in the Nodes Demands. Computer Aided Chemical Engineering, 2020, 48, 1183-1188.	0.3	2
156	A Mixed-Integer Linear Programming Model for the Design of Shale Gas Industrial Parks. ACS Sustainable Chemistry and Engineering, 2021, 9, 8783-8796.	3.2	2
157	Generalized disjunctive programming model for the synthesis of thermally linked distillation systems. Computer Aided Chemical Engineering, 2001, , 363-368.	0.3	1
158	Particulate character, inertial effects and diffusion effects in concentrated suspensions. Powder Technology, 2001, 120, 264-272.	2.1	1
159	A mathematical model for the composition of Brazilian ethanol shares for exportation to be blended to gasoline. Energy Policy, 2007, 35, 5060-5063.	4.2	1
160	Strategies for the Robust Simulation of Thermally Coupled Distillation Sequences. Computer Aided Chemical Engineering, 2011, , 196-200.	0.3	1
161	Modelling and optimization framework for the multi-objective design of buildings. Computer Aided Chemical Engineering, 2016, , 883-888.	0.3	1
162	Zero-Liquid Discharge Desalination of Hypersaline Shale Gas Wastewater: Challenges and Future Directions. Advances in Science, Technology and Innovation, 2018, , 65-67.	0.2	1

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163	Kaibel Column: Modeling and Optimization. Computer Aided Chemical Engineering, 2018, , 1183-1188.	0.3	1
164	Search Space Analysis in Work and Heat Exchange Networks Synthesis using MINLP Models. Computer Aided Chemical Engineering, 2020, 48, 1393-1398.	0.3	1
165	Integration of Chemical Process Simulators with Algebraic Modeling Languages. Computer Aided Chemical Engineering, 2020, , 1891-1896.	0.3	1
166	Efficient Energy Integration and Design of Distillation Separation Sequences. Computer Aided Chemical Engineering, 2021, , 2083-2088.	0.3	1
167	Hybrid Simulation-Optimization Logic Based Algorithms for the Rigorous Design of Chemical Process. Computer Aided Chemical Engineering, 2012, , 582-586.	0.3	1
168	A Sequential Algorithm for the Rigorous Design of Thermally Coupled Distillation Sequences. Computer Aided Chemical Engineering, 2015, 37, 1019-1024.	0.3	1
169	Synthesis of Complex Distillation Sequences with Multiple Feeds. Computer Aided Chemical Engineering, 2020, 48, 811-816.	0.3	1
170	Mathematic modelling of the rheological behaviour of the paste of â€~Xixona Turron' during the cooking process. Journal of Food Engineering, 1997, 34, 315-329.	2.7	О
171	Inclusion of quantitative safety evaluations in superstructure optimisation. Computer Aided Chemical Engineering, 2003, 15, 702-707.	0.3	O
172	Simultaneous design of heat integrated and thermally coupled distillation systems. Computer Aided Chemical Engineering, 2004, , 361-366.	0.3	0
173	Logic based algorithms for the rigorous design of thermally coupled distillation sequences. Computer Aided Chemical Engineering, 2007, , 351-356.	0.3	O
174	Numerical Determination of Distillation Boundaries for Multicomponent Homogeneous and Heterogeneous Azeotropic Systems. Computer Aided Chemical Engineering, 2010, 28, 643-648.	0.3	0
175	Integrating process simulation and MINLP methods for the optimal design of absorption cooling systems. Computer Aided Chemical Engineering, 2011, , 301-305.	0.3	О
176	Analysis of the relative strength of the singular values obtained from the non-parametric kinetic method. Journal of Thermal Analysis and Calorimetry, 2012, 107, 585-596.	2.0	О
177	Isobutane Alkylation Process Synthesis by means of Hybrid Simulation-Multiobjective Optimization. Computer Aided Chemical Engineering, 2014, 33, 1369-1374.	0.3	О
178	A New Disjunctive Formulation for the Simultaneous Optimization and Heat Integration with Cold/Hot and Unclassified Streams. Computer Aided Chemical Engineering, 2017, 40, 2167-2172.	0.3	0
179	An industrial application of process intensification in the manufacture of dimethyl and diphenyl carbonate. Computer Aided Chemical Engineering, 2017, 40, 1033-1038.	0.3	O
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