

# Miguel J Bagajewicz

## List of Publications by Citations

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156  
papers

3,901  
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161  
ext. papers

4,251  
ext. citations

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avg, IF

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L-index

#	Paper	IF	Citations
156	A review of recent design procedures for water networks in refineries and process plants. <i>Computers and Chemical Engineering</i> , <b>2000</b> , 24, 2093-2113	4	308
155	On the optimality conditions of water utilization systems in process plants with single contaminants. <i>Chemical Engineering Science</i> , <b>2000</b> , 55, 5035-5048	4.4	155
154	Energy efficient water utilization systems in process plants. <i>Computers and Chemical Engineering</i> , <b>2002</b> , 26, 59-79	4	139
153	On the Use of Linear Models for the Design of Water Utilization Systems in Process Plants with a Single Contaminant. <i>Chemical Engineering Research and Design</i> , <b>2001</b> , 79, 600-610	5.5	126
152	Managing financial risk in planning under uncertainty. <i>AIChE Journal</i> , <b>2004</b> , 50, 963-989	3.6	112
151	Mass/heat-exchange network representation of distillation networks. <i>AIChE Journal</i> , <b>1992</b> , 38, 1769-1806	3.6	105
150	Design and retrofit of sensor networks in process plants. <i>AIChE Journal</i> , <b>1997</b> , 43, 2300-2306	3.6	102
149	Algorithmic procedure to design water utilization systems featuring a single contaminant in process plants. <i>Chemical Engineering Science</i> , <b>2001</b> , 56, 1897-1911	4.4	92
148	Synthesis of non-isothermal heat integrated water networks in chemical processes. <i>Computers and Chemical Engineering</i> , <b>2008</b> , 32, 3130-3142	4	90
147	On the necessary conditions of optimality of water utilization systems in process plants with multiple contaminants. <i>Chemical Engineering Science</i> , <b>2003</b> , 58, 5349-5362	4.4	87
146	Risk Management in the Scheduling of Batch Plants under Uncertain Market Demand. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2004</b> , 43, 741-750	3.9	81
145	On zero water discharge solutions in the process industry. <i>Journal of Environmental Management</i> , <b>2004</b> , 8, 151-171		81
144	Targeting procedures for energy savings by heat integration across plants. <i>AIChE Journal</i> , <b>1999</b> , 45, 1721-1742	3.7	79
143	On the state space approach to mass/heat exchanger network design**First presented in the 1990 Annual AIChE Meeting in Chicago, paper #22d.. <i>Chemical Engineering Science</i> , <b>1998</b> , 53, 2595-2621	4.4	67
142	Energy savings in the total site heat integration across many plants. <i>Computers and Chemical Engineering</i> , <b>2000</b> , 24, 1237-1242	4	65
141	A robust method to obtain optimal and sub-optimal design and retrofit solutions of water utilization systems with multiple contaminants in process plants. <i>Computers and Chemical Engineering</i> , <b>2000</b> , 24, 1461-1466	4	63
140	Financial risk management in the planning of refinery operations. <i>International Journal of Production Economics</i> , <b>2006</b> , 103, 64-86	9.3	57

139	Prediction of protein solubility in Escherichia coli using logistic regression. <i>Biotechnology and Bioengineering</i> , <b>2010</b> , 105, 374-83	4.9	56
138	Gross error modeling and detection in plant linear dynamic reconciliation. <i>Computers and Chemical Engineering</i> , <b>1998</b> , 22, 1789-1809	4	54
137	On the role of microeconomics, planning, and finances in product design. <i>AICHE Journal</i> , <b>2007</b> , 53, 3155-3170	3.6	54
136	Rigorous Procedure for the Design of Conventional Atmospheric Crude Fractionation Units. Part I: Targeting. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2001</b> , 40, 617-626	3.9	52
135	Multiple plant heat integration in a total site. <i>AICHE Journal</i> , <b>2002</b> , 48, 2255-2270	3.6	49
134	New rigorous one-step MILP formulation for heat exchanger network synthesis. <i>Computers and Chemical Engineering</i> , <b>2005</b> , 29, 1945-1976	4	44
133	A new approach for global optimization of a class of MINLP problems with applications to water management and pooling problems. <i>AICHE Journal</i> , <b>2012</b> , 58, 2320-2335	3.6	43
132	Integral approach to plant linear dynamic reconciliation. <i>AICHE Journal</i> , <b>1997</b> , 43, 2546-2558	3.6	42
131	New measures and procedures to manage financial risk with applications to the planning of gas commercialization in Asia. <i>Computers and Chemical Engineering</i> , <b>2004</b> , 28, 2791-2821	4	41
130	New MILP formulation for instrumentation network design and upgrade. <i>AICHE Journal</i> , <b>2002</b> , 48, 2271-2282	3.6	41
129	A novel rolling horizon strategy for the strategic planning of supply chains. Application to the sugar cane industry of Argentina. <i>Computers and Chemical Engineering</i> , <b>2011</b> , 35, 2540-2563	4	40
128	On a New MILP Model for the Planning of Heat-Exchanger Network Cleaning. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2004</b> , 43, 3924-3938	3.9	39
127	All-At-Once and Step-Wise Detailed Retrofit of Heat Exchanger Networks Using an MILP Model. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 6080-6103	3.9	38
126	Instrumentation network design and upgrade for process monitoring and fault detection. <i>AICHE Journal</i> , <b>2004</b> , 50, 1870-1880	3.6	36
125	Cost-optimal design of reliable sensor networks. <i>Computers and Chemical Engineering</i> , <b>2000</b> , 23, 1757-1762	3.6	35
124	Design and upgrade of nonredundant and redundant linear sensor networks. <i>AICHE Journal</i> , <b>1999</b> , 45, 1927-1938	3.6	35
123	Novel bound contraction procedure for global optimization of bilinear MINLP problems with applications to water management problems. <i>Computers and Chemical Engineering</i> , <b>2011</b> , 35, 446-455	4	32
122	Pareto Optimal Solutions Visualization Techniques for Multiobjective Design and Upgrade of Instrumentation Networks. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2003</b> , 42, 5195-5203	3.9	32

121	Multipurpose Heat-Exchanger Networks for Heat Integration Across Plants. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2001</b> , 40, 5585-5603	3.9	31
120	Process Plant Instrumentation		31
119	Profit-based grassroots design and retrofit of water networks in process plants. <i>Computers and Chemical Engineering</i> , <b>2009</b> , 33, 436-453	4	30
118	Financial Risk Management in Offshore Oil Infrastructure Planning and Scheduling. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2004</b> , 43, 3063-3072	3.9	30
117	Product design in price-competitive markets: A case study of a skin moisturizing lotion. <i>AIChE Journal</i> , <b>2011</b> , 57, 160-177	3.6	29
116	Integrated Model for Refinery Planning, Oil Procuring, and Product Distribution. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2009</b> , 48, 463-482	3.9	28
115	Simultaneous estimation of biases and leaks in process plants. <i>Computers and Chemical Engineering</i> , <b>1999</b> , 23, 841-857	4	27
114	Data Reconciliation in Gas Pipeline Systems. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2003</b> , 42, 5596-5606	3.9	26
113	Management of Pricing Policies and Financial Risk as a Key Element for Short Term Scheduling Optimization. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2005</b> , 44, 557-575	3.9	25
112	Use of inventory and option contracts to hedge financial risk in planning under uncertainty. <i>AIChE Journal</i> , <b>2004</b> , 50, 990-998	3.6	25
111	Instrumentation design based on optimal Kalman filtering. <i>Journal of Process Control</i> , <b>2005</b> , 15, 629-638	3.9	25
110	Duality of sensor network design models for parameter estimation. <i>AIChE Journal</i> , <b>1999</b> , 45, 661-664	3.6	25
109	Design of Nonlinear Sensor Networks for Process Plants. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2008</b> , 47, 5529-5542	3.9	24
108	Financial Risk Management in the Design of Water Utilization Systems in Process Plants. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2003</b> , 42, 5249-5255	3.9	24
107	New Tool for the Evaluation of the Scheduling of Preventive Maintenance for Chemical Process Plants. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2008</b> , 47, 1910-1924	3.9	23
106	On the use of heat pumps in total site heat integration. <i>Computers and Chemical Engineering</i> , <b>2003</b> , 27, 1707-1719	4	23
105	Financial Risk Management with Product Pricing in the Planning of Refinery Operations. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2008</b> , 47, 6622-6639	3.9	22
104	Reallocation and upgrade of instrumentation in process plants. <i>Computers and Chemical Engineering</i> , <b>2000</b> , 24, 1945-1959	4	22

103	Global Optimization of Water Management Problems Using Linear Relaxation and Bound Contraction Methods. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 3738-3753	3.9	21
102	Instrumentation Design and Upgrade for Principal Components Analysis Monitoring. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2004</b> , 43, 2150-2159	3.9	21
101	Design of Crude Fractionation Units with Preflashing or Prefractionation: Energy Targeting. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2002</b> , 41, 3003-3011	3.9	21
100	Global Optimization of the Stage-wise Superstructure Model for Heat Exchanger Networks. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2015</b> , 54, 1595-1604	3.9	20
99	On the Use of Net Present Value in Investment Capacity Planning Models. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2008</b> , 47, 9413-9416	3.9	20
98	Design of Crude Distillation Plants with Vacuum Units. I. Targeting. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2002</b> , 41, 6094-6099	3.9	20
97	Rigorous Procedure for the Design of Conventional Atmospheric Crude Fractionation Units. Part II: Heat Exchanger Network. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2001</b> , 40, 627-634	3.9	20
96	Optimization of Preventive Maintenance in Chemical Process Plants. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 4329-4339	3.9	19
95	Computation of Natural Gas Pipeline Hydraulics. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2014</b> , 53, 10707-10720	3.9	18
94	Product Design: A Case Study of Slow-Release Carpet Deodorizers/Disinfectants. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2008</b> , 47, 1192-1200	3.9	18
93	A review of techniques for instrumentation design and upgrade in process plants. <i>Canadian Journal of Chemical Engineering</i> , <b>2002</b> , 80, 3-16	2.3	18
92	Design of water utilization systems in process plants with a single contaminant. <i>Waste Management</i> , <b>2000</b> , 20, 659-664	8.6	18
91	On the Degeneracy of the Water/Wastewater Allocation Problem in Process Plants. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 4340-4351	3.9	17
90	Rigorous Methodology for the Design and Upgrade of Sensor Networks Using Cutsets. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2006</b> , 45, 6679-6686	3.9	17
89	Economic value of precision in the monitoring of linear systems. <i>AIChE Journal</i> , <b>2005</b> , 51, 1304-1309	3.6	17
88	ON A SYSTEMATIC DESIGN PROCEDURE FOR SINGLE COMPONENT WATER UTILIZATION SYSTEMS IN PROCESS PLANTS. <i>Chemical Engineering Communications</i> , <b>2001</b> , 186, 183-203	2.2	17
87	Alternative Mixed-Integer Linear Programming Formulations for Shell and Tube Heat Exchanger Optimal Design. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 5970-5979	3.9	16
86	Global Optimization of Heat Exchanger Networks. Part 1: Stages/Substages Superstructure. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 5944-5957	3.9	16

85	Retrofit of Crude Units Preheating Trains: Mathematical Programming versus Pinch Technology. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2013</b> , 52, 14913-14926	3.9	16
84	On the appropriate architecture of the water/wastewater allocation problem in process plants. <i>Computer Aided Chemical Engineering</i> , <b>2009</b> , 26, 1-20	0.6	16
83	On a New MILP Model for the Planning of Heat-Exchanger Network Cleaning. Part III: Multiperiod Cleaning under Uncertainty with Financial Risk Management. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2005</b> , 44, 8136-8146	3.9	16
82	110th Anniversary: On the Departure from Heuristics and Simplified Models toward Globally Optimal Design of Process Equipment. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 18684-18702 <sup>15</sup>	3.9	15
81	Global optimization of heat exchanger networks using a new generalized superstructure. <i>Chemical Engineering Science</i> , <b>2016</b> , 147, 30-46	4.4	15
80	Linear method for the design of shell and tube heat exchangers including fouling modeling. <i>Applied Thermal Engineering</i> , <b>2017</b> , 125, 1345-1353	5.8	15
79	Shell and tube heat exchanger design using mixed-integer linear programming. <i>AIChE Journal</i> , <b>2017</b> , 63, 1907-1922	3.6	15
78	Financial risk management in the design of products under uncertainty. <i>Computers and Chemical Engineering</i> , <b>2009</b> , 33, 1056-1066	4	15
77	Comparison of steady state and integral dynamic data reconciliation. <i>Computers and Chemical Engineering</i> , <b>2000</b> , 24, 2367-2383	4	15
76	Hydrogen sulfide removal by supported vanadium oxide. <i>Environmental Science &amp; Technology</i> , <b>1988</b> , 22, 467-470	10.3	15
75	Planning Model for the Design and/or Retrofit of Industrial Water Systems. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 3788-3797	3.9	14
74	Efficient Procedure for the Design and Upgrade of Sensor Networks Using Cutsets and Rigorous Decomposition. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2006</b> , 45, 6687-6697	3.9	14
73	On the definition of software accuracy in redundant measurement systems. <i>AIChE Journal</i> , <b>2005</b> , 51, 1201-1206	3.6	14
72	On the Impact of Corrective Maintenance in the Design of Sensor Networks. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2000</b> , 39, 977-981	3.9	13
71	Design of medical diagnostics products: A case-study of a saliva diagnostics kit. <i>Computers and Chemical Engineering</i> , <b>2009</b> , 33, 1067-1076	4	12
70	Financial Risk Management in the Planning of Energy Recovery in the Total Site. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2003</b> , 42, 5239-5248	3.9	12
69	On a Strategy of Serial Identification with Collective Compensation for Multiple Gross Error Estimation in Linear Steady-State Reconciliation. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1999</b> , 38, 2119-2128	3.9	12
68	New efficient breadth-first/level traversal tree search method for the design and upgrade of sensor networks. <i>AIChE Journal</i> , <b>2011</b> , 57, 1302-1309	3.6	11

67	ON THE DESIGN FLEXIBILITY OF ATMOSPHERIC CRUDE FRACTIONATION UNITS* Presented at the AIChE Spring Meeting, Houston, March 1997. Paper 105a. Area 10-(a). <i>Chemical Engineering Communications</i> , <b>1998</b> , 166, 111-136	2.2	11
66	On the use of heat belts for energy integration across many plants in the total site. <i>Canadian Journal of Chemical Engineering</i> , <b>2001</b> , 79, 633-642	2.3	11
65	On the Performance of Principal Component Analysis in Multiple Gross Error Identification. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1999</b> , 38, 2005-2012	3.9	11
64	Energy savings horizons for the retrofit of chemical processes. Application to crude fractionation units. <i>Computers and Chemical Engineering</i> , <b>1998</b> , 23, 1-9	4	10
63	Optimization of preventive maintenance scheduling in processing plants. <i>Computer Aided Chemical Engineering</i> , <b>2008</b> , 25, 319-324	0.6	10
62	A new approach for the design of multicomponent water/wastewater networks. <i>Computer Aided Chemical Engineering</i> , <b>2008</b> , 25, 43-48	0.6	10
61	Stochastic-based accuracy of data reconciliation estimators for linear systems. <i>Computers and Chemical Engineering</i> , <b>2008</b> , 32, 1257-1269	4	10
60	Financial Risk Management for Investment Planning of New Commodities Considering Plant Location and Budgeting. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2006</b> , 45, 7582-7591	3.9	10
59	Incorporating Fouling Modeling into Shell-and-Tube Heat Exchanger Design. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 4377-4385	3.9	9
58	Value of accuracy in linear systems. <i>AIChE Journal</i> , <b>2006</b> , 52, 638-650	3.6	9
57	Reverse Osmosis Network Rigorous Design Optimization. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 3060-3071	3.9	9
56	Globally optimal linear approach for the design of process equipment: The case of air coolers. <i>AIChE Journal</i> , <b>2018</b> , 64, 886-903	3.6	8
55	Global optimization based on subspaces elimination: Applications to generalized pooling and water management problems. <i>AIChE Journal</i> , <b>2012</b> , 58, 2336-2345	3.6	8
54	On the appropriate modeling of process plant water systems. <i>AIChE Journal</i> , <b>2009</b> , 56, NA-NA	3.6	8
53	Design of Crude Distillation Plants with Vacuum Units. II. Heat Exchanger Network Design. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2002</b> , 41, 6100-6106	3.9	8
52	On the Energy Efficiency of Stripping-Type Crude Distillation. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2002</b> , 41, 5819-5825	3.9	8
51	On the probability distribution and reconciliation of process plant data. <i>Computers and Chemical Engineering</i> , <b>1996</b> , 20, 813-819	4	8
50	Linear method for the design of shell and tube heat exchangers using the Bell- <del>Delaware</del> method. <i>AIChE Journal</i> , <b>2019</b> , 65, e16602	3.6	7

49	New sensor network design and retrofit method based on value of information. <i>AICHE Journal</i> , <b>2011</b> , 57, 2136-2148	3.6	7
48	Optimal Design of Double Pipe Heat Exchanger Structures. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 12080-12096	3.9	6
47	Integrating pricing policies in the strategic planning of supply chains: A case study of the sugar cane industry in Argentina. <i>Computer Aided Chemical Engineering</i> , <b>2010</b> , 103-108	0.6	6
46	Globally optimal design of air coolers considering fan performance. <i>Applied Thermal Engineering</i> , <b>2019</b> , 161, 114188	5.8	5
45	On the impact of sensor maintenance policies on stochastic-based accuracy. <i>Computers and Chemical Engineering</i> , <b>2009</b> , 33, 1491-1498	4	5
44	Design of non-isothermal process water networks. <i>Computer Aided Chemical Engineering</i> , <b>2007</b> , 377-382	0.6	5
43	Globally optimal synthesis of heat exchanger networks. Part I: Minimal networks. <i>AICHE Journal</i> , <b>2020</b> , 66, e162667	3.6	4
42	Set Trimming Procedure for the Design Optimization of Shell and Tube Heat Exchangers. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 14048-14054	3.9	4
41	Parallel computing approaches to sensor network design using the value paradigm. <i>Computers and Chemical Engineering</i> , <b>2011</b> , 35, 1119-1134	4	4
40	New superstructure-based model for the globally optimal synthesis of refinery hydrogen networks. <i>Journal of Cleaner Production</i> , <b>2021</b> , 292, 126022	10.3	4
39	Global optimization of the design of horizontal shell and tube condensers. <i>Chemical Engineering Science</i> , <b>2021</b> , 236, 116474	4.4	4
38	Globally optimal synthesis of heat exchanger networks. Part II: Non-minimal networks. <i>AICHE Journal</i> , <b>2020</b> , 66, e16264	3.6	3
37	Globally optimal linear approach to the design of heat exchangers using threshold fouling modeling. <i>AICHE Journal</i> , <b>2018</b> , 64, 2089-2102	3.6	3
36	On the Minimum Number of Units in Heat Exchanger Networks. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2014</b> , 53, 16899-16904	3.9	3
35	ON THE APPLICATION OF A CONSUMER PREFERENCE-BASED METHOD FOR DESIGNING PRODUCTS TO WINE FERMENTATION MONITORING DEVICES. <i>Chemical Engineering Communications</i> , <b>2010</b> , 198, 255-272	2.2	3
34	A MIXED INTEGER LINEAR PROGRAMMING-BASED TECHNIQUE FOR THE ESTIMATION OF MULTIPLE GROSS ERRORS IN PROCESS MEASUREMENTS. <i>Chemical Engineering Communications</i> , <b>2000</b> , 177, 139-155	2.2	3
33	REMOVING SINGULARITIES AND ASSESSING UNCERTAINTIES IN TWO EFFICIENT GROSS ERROR COLLECTIVE COMPENSATION METHODS. <i>Chemical Engineering Communications</i> , <b>2000</b> , 178, 1-20	2.2	3
32	Performance evaluation of PCA tests for multiple gross error identification. <i>Computers and Chemical Engineering</i> , <b>1999</b> , 23, S589-S592	4	3

31	Global Optimization of Heat Exchanger Networks. Part 2: Stages/Substages Superstructure with Variable Cp. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 5958-5969	3.9	2
30	Managing financial risk in the planning of heat exchanger cleaning. <i>Computer Aided Chemical Engineering</i> , <b>2004</b> , 18, 235-240	0.6	2
29	Integration of Process Systems Engineering and Business Decision Making Tools: Financial Risk Management and Other Emerging Procedures <b>2005</b> , 323-377		2
28	Global Optimization of Gasoline Blending Model using Bound Contraction Technique. <i>Computer Aided Chemical Engineering</i> , <b>2016</b> , 38, 1293-1298	0.6	2
27	Globally Optimal Design Optimization of Cooling Water Systems. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 9473-9485	3.9	1
26	Efficient Approximate Methods for the Design and Upgrade of Sensor Networks. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2012</b> , 120411151511005	3.9	1
25	COMPARATIVE ANALYSIS OF DIFFERENT ASSUMPTIONS FOR THE DESIGN OF SINGLE-CONTAMINANT WATER NETWORKS. <i>Chemical Engineering Communications</i> , <b>2010</b> , 197, 859-880	2.2	1
24	Software Accuracy-Based Sensor Network Design and Upgrade in Process Plants. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 4850-4857	3.9	1
23	New method for sensor network design and upgrade for optimal process monitoring. <i>Computer Aided Chemical Engineering</i> , <b>2008</b> , 429-434	0.6	1
22	Simultaneous treatment of environmental and financial risk in process design. <i>International Journal of Environment and Pollution</i> , <b>2007</b> , 29, 30	0.7	1
21	A New MILP Formulation for Instrumentation Network Design and Upgrade. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2001</b> , 34, 261-266		1
20	An MILP Model for Cost Optimal Instrumentation Network Design and Upgrade for Fault Detection. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2001</b> , 34, 237-242		1
19	Review of Recent Results in Instrumentation Design and Upgrade for Process Plants. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2001</b> , 34, 227-232		1
18	PERFORMANCE EVALUATION OF PCA TESTS IN SERIAL ELIMINATION STRATEGIES FOR GROSS ERROR IDENTIFICATION. <i>Chemical Engineering Communications</i> , <b>2000</b> , 183, 119-139	2.2	1
17	Design Optimization of Double-Pipe Heat Exchangers Using a Discretized Model. <i>Industrial &amp; Engineering Chemistry Research</i> ,	3.9	1
16	Globally optimal design of intensified shell and tube heat exchangers using complete set trimming. <i>Computers and Chemical Engineering</i> , <b>2022</b> , 158, 107644	4	1
15	Global Optimization of Counter Current Gasketed Plate Heat Exchanger. <i>Computer Aided Chemical Engineering</i> , <b>2019</b> , 46, 259-264	0.6	1
14	Does Pressure-Retarded Osmosis Help Reverse Osmosis in Desalination?. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2021</b> , 60, 4366-4374	3.9	1

13	Model Reformulation and Global Optimization of Oil Production Using Gas Lift. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2016</b> , 55, 10114-10120	3.9	1
12	Globally Optimal Design of Double Pipe Heat Exchangers using Local Properties and Discretized Models. <i>Computer Aided Chemical Engineering</i> , <b>2019</b> , 187-192	0.6	1
11	Computational Study of the Use of Set Trimming for the Globally Optimal Design of Gasketed-Plate Heat Exchangers. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2021</b> , 60, 1746-1755	3.9	1
10	Challenges in Replacing Heuristics-Based Trial-and-Error Procedures by Mathematical Optimization for Basic Equipment Design. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 44, 439-444	0.6	1
9	Globally optimal synthesis of heat exchanger networks. Part III: Non-isothermal mixing in minimal and non-minimal networks. <i>AIChE Journal</i> , <b>2021</b> , 67, e17393	3.6	1
8	Nonlinear Model for the Globally Optimal Design of Vertical Vapor Liquid Separation Vessels. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 21155-21166	3.9	0
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6	Data Reconciliation and Software Methods for Bias Detection <b>2011</b> , 364-381		
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