

Gade P. Rangaiah

List of Publications by Year in descending order

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234
papers

5,905
citations

70961

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114278

63
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docs citations

291
times ranked

3723
citing authors

#	ARTICLE	IF	CITATIONS
1	Application and Analysis of Methods for Selecting an Optimal Solution from the Pareto-Optimal Front obtained by Multiobjective Optimization. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 560-574.	1.8	199
2	Photocatalytic Degradation of Methylene Blue by Titanium Dioxide: Experimental and Modeling Study. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 14641-14649.	1.8	171
3	Multiobjective Optimization of Steam Reformer Performance Using Genetic Algorithm. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 706-717.	1.8	125
4	Retrofitting conventional column systems to dividing-Wall Columns. <i>Chemical Engineering Research and Design</i> , 2009, 87, 47-60.	2.7	121
5	Knowledge based decision making method for the selection of mixed refrigerant systems for energy efficient LNG processes. <i>Applied Energy</i> , 2013, 111, 1018-1031.	5.1	116
6	Multi-objective optimization of industrial hydrogen plants. <i>Chemical Engineering Science</i> , 2001, 56, 999-1010.	1.9	112
7	Evaluation of genetic algorithms and simulated annealing for phase equilibrium and stability problems. <i>Fluid Phase Equilibria</i> , 2001, 187-188, 83-109.	1.4	100
8	An improved multi-objective differential evolution with a termination criterion for optimizing chemical processes. <i>Computers and Chemical Engineering</i> , 2013, 56, 155-173.	2.0	89
9	Improving energy efficiency of dividing-wall columns using heat pumps, Organic Rankine Cycle and Kalina Cycle. <i>Chemical Engineering and Processing: Process Intensification</i> , 2014, 76, 45-59.	1.8	84
10	Differential Evolution with Tabu List for Solving Nonlinear and Mixed-Integer Nonlinear Programming Problems. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 7126-7135.	1.8	82
11	Multi-objective Optimization of the Operation of an Industrial Low-Density Polyethylene Tubular Reactor Using Genetic Algorithm and Its Jumping Gene Adaptations. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 3182-3199.	1.8	78
12	Tabu search for global optimization of continuous functions with application to phase equilibrium calculations. <i>Computers and Chemical Engineering</i> , 2003, 27, 1665-1679.	2.0	77
13	First-Principles, Data-Based, and Hybrid Modeling and Optimization of an Industrial Hydrocracking Unit. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 7807-7816.	1.8	77
14	Multiobjective Optimization of an Industrial Ethylene Reactor Using a Nondominated Sorting Genetic Algorithm. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 124-141.	1.8	76
15	Differential Evolution with Tabu List for Global Optimization and Its Application to Phase Equilibrium and Parameter Estimation Problems. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 3410-3421.	1.8	76
16	Review of Heat Exchanger Network Retrofitting Methodologies and Their Applications. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 11205-11220.	1.8	74
17	Multiobjective optimization of an industrial styrene reactor. <i>Computers and Chemical Engineering</i> , 2003, 27, 111-130.	2.0	72
18	Modeling, Simulation, and Multi-objective Optimization of an Industrial Hydrocracking Unit. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 1354-1372.	1.8	72

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19	Multi-objective optimization using MS Excel with an application to design of a falling-film evaporator system. <i>Food and Bioproducts Processing</i> , 2012, 90, 123-134.	1.8	72
20	A Study of Equation-Solving and Gibbs Free Energy Minimization Methods for Phase Equilibrium Calculations. <i>Chemical Engineering Research and Design</i> , 2002, 80, 745-759.	2.7	71
21	Multi-objective optimization of two alkali catalyzed processes for biodiesel from waste cooking oil. <i>Energy Conversion and Management</i> , 2014, 85, 361-372.	4.4	71
22	Multi-Objective Optimization Applications in Chemical Process Engineering: Tutorial and Review. <i>Processes</i> , 2020, 8, 508.	1.3	71
23	Design of shell-and-tube heat exchangers for multiple objectives using elitist non-dominated sorting genetic algorithm with termination criteria. <i>Applied Thermal Engineering</i> , 2016, 93, 888-899.	3.0	69
24	When to use cascade control. <i>Industrial & Engineering Chemistry Research</i> , 1990, 29, 2163-2166.	1.8	68
25	Plantwide Control of Industrial Processes: An Integrated Framework of Simulation and Heuristics. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 8300-8313.	1.8	66
26	Multi-objective optimization for the design and operation of energy efficient chemical processes and power generation. <i>Current Opinion in Chemical Engineering</i> , 2015, 10, 49-62.	3.8	65
27	Review of Technological Advances in Bioethanol Recovery and Dehydration. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 5147-5163.	1.8	65
28	Design and control of vapor recompression assisted extractive distillation for separating n-hexane and ethyl acetate. <i>Separation and Purification Technology</i> , 2020, 240, 116655.	3.9	60
29	Multiobjective optimization of an industrial styrene monomer manufacturing process. <i>Chemical Engineering Science</i> , 2005, 60, 347-363.	1.9	59
30	Bioethanol recovery and purification using extractive dividing-wall column and pressure swing adsorption: An economic comparison after heat integration and optimization. <i>Separation and Purification Technology</i> , 2015, 149, 413-427.	3.9	57
31	A study of differential evolution and tabu search for benchmark, phase equilibrium and phase stability problems. <i>Computers and Chemical Engineering</i> , 2007, 31, 760-772.	2.0	56
32	Advanced Control Strategies for the Regulation of Hypnosis with Propofol. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 3880-3897.	1.8	56
33	Review and Analysis of Blood Glucose (BG) Models for Type 1 Diabetic Patients. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 12041-12066.	1.8	56
34	Multi-objective optimization of a bio-diesel production process. <i>Fuel</i> , 2013, 103, 269-277.	3.4	56
35	Novel bare-bones particle swarm optimization and its performance for modeling vapor-liquid equilibrium data. <i>Fluid Phase Equilibria</i> , 2011, 301, 33-45.	1.4	54
36	Evaluation of Covariance Matrix Adaptation Evolution Strategy, Shuffled Complex Evolution and Firefly Algorithms for phase stability, phase equilibrium and chemical equilibrium problems. <i>Chemical Engineering Research and Design</i> , 2012, 90, 2051-2071.	2.7	54

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37	Analysis of Weighting and Selection Methods for Pareto-Optimal Solutions of Multiobjective Optimization in Chemical Engineering Applications. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 14850-14867.	1.8	54
38	Design stage optimization of an industrial low-density polyethylene tubular reactor for multiple objectives using NSGA-II and its jumping gene adaptations. <i>Chemical Engineering Science</i> , 2007, 62, 2346-2365.	1.9	53
39	Proportional-Integral Control and Model Predictive Control of Extractive Dividing-Wall Column Based on Temperature Differences. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 10572-10590.	1.8	48
40	Performance analysis of ultraviolet water disinfection reactors using computational fluid dynamics simulation. <i>Chemical Engineering Journal</i> , 2013, 221, 398-406.	6.6	45
41	Robust PID Controller for Blood Glucose Regulation in Type I Diabetics. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 8257-8268.	1.8	44
42	Operator training simulators in the chemical industry: review, issues, and future directions. <i>Reviews in Chemical Engineering</i> , 2014, 30, .	2.3	44
43	An adaptive internal model control strategy for pH neutralization. <i>Chemical Engineering Science</i> , 1997, 52, 3067-3074.	1.9	42
44	Evaluation of stochastic global optimization methods for modeling vapor-liquid equilibrium data. <i>Fluid Phase Equilibria</i> , 2010, 287, 111-125.	1.4	40
45	A simple and effective procedure for control degrees of freedom. <i>Chemical Engineering Science</i> , 2006, 61, 1184-1194.	1.9	39
46	Implementation and evaluation of random tunneling algorithm for chemical engineering applications. <i>Computers and Chemical Engineering</i> , 2006, 30, 1400-1415.	2.0	39
47	Optimal Design of a Rotating Packed Bed for VOC Stripping from Contaminated Groundwater. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 835-847.	1.8	39
48	A computational study of the effect of lamp arrangements on the performance of ultraviolet water disinfection reactors. <i>Chemical Engineering Science</i> , 2015, 122, 299-306.	1.9	39
49	Application and Evaluation of Three Methodologies for Plantwide Control of the Styrene Monomer Plant. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 10941-10961.	1.8	38
50	Phase and chemical equilibrium calculations by direct search optimization. <i>Computers and Chemical Engineering</i> , 1999, 23, 1183-1191.	2.0	37
51	An efficient constraint handling method with integrated differential evolution for numerical and engineering optimization. <i>Computers and Chemical Engineering</i> , 2012, 37, 74-88.	2.0	37
52	One-step approach for heat exchanger network retrofitting using integrated differential evolution. <i>Computers and Chemical Engineering</i> , 2013, 50, 92-104.	2.0	37
53	Improved heat exchanger network retrofitting using exchanger reassignment strategies and multi-objective optimization. <i>Energy</i> , 2014, 67, 584-594.	4.5	37
54	Process Development, Assessment, and Control of Reactive Dividing-Wall Column with Vapor Recompression for Producing <i>n</i> -Propyl Acetate. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 276-295.	1.8	37

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55	Anti-windup schemes for uncertain nonlinear systems. IET Control Theory and Applications, 2000, 147, 321-329.	1.7	35
56	Optimization of Recovery Processes for Multiple Economic and Environmental Objectives. Industrial & Engineering Chemistry Research, 2009, 48, 7662-7681.	1.8	34
57	Constrained and unconstrained Gibbs free energy minimization in reactive systems using genetic algorithm and differential evolution with tabu list. Fluid Phase Equilibria, 2011, 300, 120-134.	1.4	34
58	Multi-objective optimization of an industrial penicillin V bioreactor train using non-dominated sorting genetic algorithm. Biotechnology and Bioengineering, 2007, 98, 586-598.	1.7	33
59	Inherent Safety Analysis of a Propane Precooled Gas-Phase Liquefied Natural Gas Process. Industrial & Engineering Chemistry Research, 2009, 48, 4917-4927.	1.8	33
60	Process Optimization of Heat-Integrated Extractive Dividing-Wall Columns for Energy-Saving Separation of CO ₂ and Hydrocarbons. Industrial & Engineering Chemistry Research, 2020, 59, 11000-11011.	1.8	32
61	Heat-pump assisted distillation versus double-effect distillation for bioethanol recovery followed by pressure swing adsorption for bioethanol dehydration. Separation and Purification Technology, 2019, 210, 574-586.	3.9	31
62	Multi-Objective Optimization. Advances in Process Systems Engineering, 2008, , .	0.3	31
63	Estimating Second-Order plus Dead Time Model Parameters. Industrial & Engineering Chemistry Research, 1994, 33, 1867-1871.	1.8	30
64	Identification and predictive control of a multistage evaporator. Control Engineering Practice, 2010, 18, 1418-1428.	3.2	30
65	Plantwide Control System Design and Performance Evaluation for Ammonia Synthesis Process. Industrial & Engineering Chemistry Research, 2010, 49, 12538-12547.	1.8	30
66	Simulation and Multiobjective Optimization of an Industrial Hydrogen Plant Based on Refinery Off-Gas. Industrial & Engineering Chemistry Research, 2002, 41, 2248-2261.	1.8	29
67	A Comparative Study of Recent/Popular PID Tuning Rules for Stable, First-Order Plus Dead Time, Single-Input Single-Output Processes. Industrial & Engineering Chemistry Research, 2008, 47, 344-368.	1.8	29
68	Multiobjective Optimization of an Industrial LPG Thermal Cracker using a First Principles Model. Industrial & Engineering Chemistry Research, 2009, 48, 9523-9533.	1.8	29
69	Retrofitting of heat exchanger networks involving streams with variable heat capacity: Application of single and multi-objective optimization. Applied Thermal Engineering, 2015, 75, 677-684.	3.0	27
70	Adaptive internal model control of nonlinear processes. Chemical Engineering Science, 1999, 54, 1205-1220.	1.9	26
71	Experimental evaluation of an augmented IMC for nonlinear systems. Control Engineering Practice, 2000, 8, 1167-1176.	3.2	26
72	Evaluation of integrated differential evolution and unified bare-bones particle swarm optimization for phase equilibrium and stability problems. Fluid Phase Equilibria, 2011, 310, 129-141.	1.4	26

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73	Closed-loop tuning of process control systems. <i>Chemical Engineering Science</i> , 1987, 42, 2173-2182.	1.9	25
74	A study of finding many desirable solutions in multiobjective optimization of chemical processes. <i>Computers and Chemical Engineering</i> , 2007, 31, 1257-1271.	2.0	25
75	Criteria for Performance Assessment of Plantwide Control Systems. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 9209-9221.	1.8	25
76	Development and Multiobjective Optimization of Improved Cumene Production Processes. <i>Materials and Manufacturing Processes</i> , 2015, 30, 444-457.	2.7	25
77	A Regional Blood Flow Model for \hat{I}^{22} -Microglobulin Kinetics and for Simulating Intra-dialytic Exercise Effect. <i>Annals of Biomedical Engineering</i> , 2011, 39, 2879-2890.	1.3	24
78	Modeling and Optimization of a Fermentation Process Integrated with Cell Recycling and Pervaporation for Multiple Objectives. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 5542-5551.	1.8	24
79	Optimizing reboiler duty and reflux ratio profiles of vapor recompressed batch distillation. <i>Separation and Purification Technology</i> , 2019, 213, 553-570.	3.9	24
80	Studies in constrained optimization of chemical process problems. <i>Computers and Chemical Engineering</i> , 1985, 9, 395-404.	2.0	23
81	Application of a plant-wide control design to the HDA process. <i>Computers and Chemical Engineering</i> , 2003, 27, 73-94.	2.0	23
82	Modeling and analysis of solid catalyzed reactive HiGee stripping. <i>Chemical Engineering Science</i> , 2012, 80, 242-252.	1.9	23
83	The effect of short air exposure periods on the performance of cellulose acetate membranes from casting solutions with high cellulose acetate content. <i>Journal of Applied Polymer Science</i> , 1978, 22, 1919-1944.	1.3	22
84	A novel graphical approach to target CO ₂ emissions for energy resource planning and utility system optimization. <i>Applied Energy</i> , 2013, 104, 783-790.	5.1	22
85	Operator training simulator for biodiesel synthesis from waste cooking oil. <i>Chemical Engineering Research and Design</i> , 2016, 99, 55-68.	2.7	22
86	Multi-objective optimization of vapor recompressed distillation column in batch processing: Improving energy and cost savings. <i>Applied Thermal Engineering</i> , 2019, 150, 1273-1296.	3.0	22
87	Investigating the trade-off between operating revenue and CO ₂ emissions from crude oil distillation using a blend of two crudes. <i>Fuel</i> , 2011, 90, 3577-3585.	3.4	21
88	Multiobjective Optimization of Cold-End Separation Process in an Ethylene Plant. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 17229-17240.	1.8	21
89	Retrofitting amine absorption process for natural gas sweetening via hybridization with membrane separation. <i>International Journal of Greenhouse Gas Control</i> , 2014, 29, 221-230.	2.3	21
90	Design, Optimization, and Retrofit of the Formic Acid Process I: Base Case Design and Dividing-Wall Column Retrofit. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 9554-9570.	1.8	21

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91	Design and optimization of isopropanol process based on two alternatives for reactive distillation. <i>Chemical Engineering and Processing: Process Intensification</i> , 2017, 118, 108-116.	1.8	20
92	Application of time domain curve-fitting to parameter estimation in RTD models.. <i>Journal of Chemical Engineering of Japan</i> , 1990, 23, 124-130.	0.3	19
93	A method for multiphase equilibrium calculations. <i>Computers and Chemical Engineering</i> , 1998, 22, 897-911.	2.0	19
94	Optimal Process Design and Effective Plantwide Control of Industrial Processes by a Simulation-Based Heuristic Approach. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 5955-5970.	1.8	19
95	Performance Assessment of Plantwide Control Systems of Industrial Processes. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 1220-1231.	1.8	19
96	Modeling and optimization of a multi-product biosynthesis factory for multiple objectives. <i>Metabolic Engineering</i> , 2010, 12, 251-267.	3.6	19
97	Integrated Differential Evolution for Global Optimization and Its Performance for Modeling Vapor-Liquid Equilibrium Data. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 10047-10061.	1.8	19
98	Holistic Approach for Retrofit Design of Cooling Water Networks. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 13059-13078.	1.8	19
99	Improving energy efficiency of distillation using heat pump assisted columns. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2014, 9, 905-928.	0.8	19
100	Plantwide Control of Biodiesel Production from Waste Cooking Oil Using Integrated Framework of Simulation and Heuristics. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 14408-14418.	1.8	19
101	Nano-catalytic heterogeneous reactive distillation for algal biodiesel production: Multi-objective optimization and heat integration. <i>Energy Conversion and Management</i> , 2021, 241, 114298.	4.4	19
102	Multiobjective Framework for Model-based Design of Experiments to Improve Parameter Precision and Minimize Parameter Correlation. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 8289-8304.	1.8	18
103	Process Retrofitting via Intensification: A Heuristic Methodology and Its Application to Isopropyl Alcohol Process. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 3614-3629.	1.8	18
104	Evolutionary Algorithm Based Multiobjective Optimization of Vapor Recompressed Batch Extractive Distillation: Assessing Economic Potential and Environmental Impact. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 5032-5046.	1.8	18
105	Preference Ranking on the Basis of Ideal-Average Distance Method for Multi-Criteria Decision-Making. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 11216-11230.	1.8	18
106	A Simplified Procedure for Quick Design of Dividing-Wall Columns for Industrial Applications. <i>Chemical Product and Process Modeling</i> , 2009, 4, .	0.5	17
107	Design, Optimization, and Retrofit of the Formic Acid Process II: Reactive Distillation and Reactive Dividing-Wall Column Retrofits. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 14665-14679.	1.8	17
108	Product design: Impact of government policy and consumer preference on company profit and corporate social responsibility. <i>Computers and Chemical Engineering</i> , 2018, 118, 118-131.	2.0	17

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109	Closed-Loop Identification of TITO Processes Using Time-Domain Curve Fitting and Genetic Algorithms. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 2818-2826.	1.8	16
110	HiGee Stripper-Membrane System for Decentralized Bioethanol Recovery and Purification. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 4572-4585.	1.8	16
111	Application of Artificial Neural Network and Genetic Programming in Modeling and Optimization of Ultraviolet Water Disinfection Reactors. <i>Chemical Engineering Communications</i> , 2015, 202, 1415-1424.	1.5	16
112	Closed-loop identification and model predictive control of extractive dividing-wall column. <i>Chemical Engineering and Processing: Process Intensification</i> , 2019, 142, 107552.	1.8	16
113	Vapor recompressed batch distillation: Optimizing reflux ratio at variable mode. <i>Computers and Chemical Engineering</i> , 2019, 124, 184-196.	2.0	16
114	Development and optimization of a novel process of double-effect distillation with vapor recompression for bioethanol recovery and vapor permeation for bioethanol dehydration. <i>Journal of Chemical Technology and Biotechnology</i> , 2019, 94, 1041-1056.	1.6	16
115	Economic and Environmental Criteria and Trade-Offs for Recovery Processes. <i>Materials and Manufacturing Processes</i> , 2011, 26, 431-445.	2.7	15
116	Assessment of capabilities and limitations of stochastic global optimization methods for modeling mean activity coefficients of ionic liquids. <i>Fluid Phase Equilibria</i> , 2013, 340, 15-26.	1.4	15
117	Design and analysis of an ethyl benzene production process using conventional distillation columns and dividing-wall column for multiple objectives. <i>Chemical Engineering Research and Design</i> , 2017, 118, 142-157.	2.7	15
118	Mixed-Integer dynamic optimization of conventional and vapor recompressed batch distillation for economic and environmental objectives. <i>Chemical Engineering Research and Design</i> , 2020, 154, 70-85.	2.7	15
119	A novel vapor recompressed batch extractive distillation: Design and retrofitting. <i>Separation and Purification Technology</i> , 2021, 260, 118225.	3.9	15
120	A Time Delay Compensation Strategy for Uncertain Single-Input Single-Output Nonlinear Processes. <i>Industrial & Engineering Chemistry Research</i> , 1999, 38, 4309-4316.	1.8	14
121	A Molecular-Based Model for Normal Fluid Mixtures: A Perturbed Lennard-Jones Chain Equation of State. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 1497-1504.	1.8	14
122	Modeling and Analysis of Hybrid Reactive Stripper-Membrane Process for Lactic Acid Recovery. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 2907-2916.	1.8	14
123	Performance analysis of stopping criteria of population-based metaheuristics for global optimization in phase equilibrium calculations and modeling. <i>Fluid Phase Equilibria</i> , 2016, 427, 104-125.	1.4	14
124	Designing, Retrofitting, and Revamping Water Networks in Petroleum Refineries Using Multiobjective Optimization. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 226-236.	1.8	14
125	Evaluation of two termination criteria in evolutionary algorithms for multi-objective optimization of complex chemical processes. <i>Chemical Engineering Research and Design</i> , 2017, 124, 58-65.	2.7	14
126	Multi-objective optimisation of a double contact double absorption sulphuric acid plant for cleaner operation. <i>Journal of Cleaner Production</i> , 2018, 181, 652-662.	4.6	14

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127	Surrogate modelling of net radiation flux from pool fires in a hydrocarbon storage facility. <i>Chemical Engineering Research and Design</i> , 2018, 114, 296-309.	2.7	14
128	Integrated Biorefinery of Empty Fruit Bunch from Palm Oil Industries to Produce Valuable Biochemicals. <i>Processes</i> , 2020, 8, 868.	1.3	14
129	Integrated Framework Incorporating Optimization for Plant-Wide Control of Industrial Processes. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 8122-8137.	1.8	13
130	Personalized Hybrid Models for Exercise, Meal, and Insulin Interventions in Type 1 Diabetic Children and Adolescents. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 13020-13033.	1.8	13
131	Energy optimization of crude oil distillation using different designs of pre-flash drums. <i>Applied Thermal Engineering</i> , 2014, 73, 1204-1210.	3.0	13
132	Robust controller synthesis for multivariable nonlinear systems with unmeasured disturbances. <i>Chemical Engineering Science</i> , 2004, 59, 977-986.	1.9	12
133	Attainment of PI Achievable Performance for Linear SISO Processes with Deadtime by Iterative Tuning. <i>Canadian Journal of Chemical Engineering</i> , 2005, 83, 723-736.	0.9	12
134	A Comprehensive Evaluation of PID, Cascade, Model-Predictive, and RTDA Controllers for Regulation of Hypnosis. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 5719-5730.	1.8	12
135	A hybrid global optimization algorithm and its application to parameter estimation problems. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2011, 6, 379-390.	0.8	12
136	Personalized mechanistic models for exercise, meal and insulin interventions in children and adolescents with type 1 diabetes. <i>Journal of Theoretical Biology</i> , 2014, 357, 62-73.	0.8	12
137	Optimizing algal biodiesel production from a novel reactive distillation based unit: Reducing CO ₂ emission and cost. <i>Chemical Engineering and Processing: Process Intensification</i> , 2022, 176, 108948.	1.8	12
138	Use of alternate process variables for enhancing pH control performance. <i>Chemical Engineering Science</i> , 1998, 53, 3041-3049.	1.9	11
139	A method for simulation and optimization of multiphase distillation. <i>Computers and Chemical Engineering</i> , 2000, 24, 23-37.	2.0	11
140	Triple-Objective Optimization of an Industrial Hydrogen Plant.. <i>Journal of Chemical Engineering of Japan</i> , 2001, 34, 1341-1355.	0.3	11
141	A perturbed Lennard-Jones chain equation of state for polymer mixtures: applications to vapor-liquid and liquid-liquid equilibria. <i>Fluid Phase Equilibria</i> , 2001, 189, 135-150.	1.4	11
142	Internal model control with feedback compensation for uncertain non-linear systems. <i>International Journal of Control</i> , 2001, 74, 1456-1466.	1.2	11
143	Surrogate modelling for enhancing consequence analysis based on computational fluid dynamics. <i>Journal of Loss Prevention in the Process Industries</i> , 2017, 48, 173-185.	1.7	11
144	A comparative study of three advanced controllers for the regulation of hypnosis. <i>Journal of Process Control</i> , 2009, 19, 1458-1469.	1.7	10

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145	Comparison of toxin removal outcomes in online hemodiafiltration and intra-dialytic exercise in high-flux hemodialysis: A prospective randomized open-label clinical study protocol. BMC Nephrology, 2012, 13, 156.	0.8	10
146	Retrofitting an isopropanol process based on reactive distillation and propylene-propane separation. Chemical Engineering and Processing: Process Intensification, 2016, 108, 164-173.	1.8	10
147	Plantwide Control of the Formic Acid Production Process Using an Integrated Framework of Simulation and Heuristics. Industrial & Engineering Chemistry Research, 2018, 57, 13478-13489.	1.8	10
148	Process Identification from Closed-Loop Response Using Optimization Methods. Chemical Engineering Research and Design, 2000, 78, 528-541.	2.7	9
149	Control degrees of freedom using the restraining number: further evaluation. Asia-Pacific Journal of Chemical Engineering, 2008, 3, 638-647.	0.8	9
150	Multi-objective Optimization of Heat Integrated Water Networks in Petroleum Refineries. Computer Aided Chemical Engineering, 2014, 33, 1531-1536.	0.3	9
151	Set point weighting for simplified model predictive control. The Chemical Engineering Journal, 1992, 50, 159-163.	0.4	8
152	Effect of gas evolution on dispersion in an electrochemical reactor. Journal of Applied Electrochemistry, 1993, 23, 113.	1.5	8
153	Enhanced IMC for Glucose Control in Type I Diabetics Using a Detailed Physiological Model. Food and Bioproducts Processing, 2006, 84, 227-236.	1.8	8
154	Design Optimization of an LPG Thermal Cracker for Multiple Objectives. International Journal of Chemical Reactor Engineering, 2011, 9, .	0.6	8
155	Strategies for Enhancing Nonlinear Internal Model Control of pH Processes.. Journal of Chemical Engineering of Japan, 1999, 32, 59-68.	0.3	8
156	Comparison of two algorithms for solving STIFF differential equations. Computers and Structures, 1985, 20, 915-920.	2.4	7
157	Pervaporation of Water and Ethanol Using a Cellulose Acetate Butyrate Membrane. Journal of Colloid and Interface Science, 1993, 160, 502-504.	5.0	7
158	A method for calculation of vapor-liquid and liquid-liquid equilibria. Computers and Chemical Engineering, 1997, 21, 905-913.	2.0	7
159	A Methodology for Autotuning of Multivariable Systems. Industrial & Engineering Chemistry Research, 2002, 41, 4605-4615.	1.8	7
160	Models of an Industrial Evaporator System for Education and Research in Process Control. Asia-Pacific Journal of Chemical Engineering, 2002, 10, 105-127.	0.0	7
161	Plant-Wide Control: Methodologies and Applications. Reviews in Chemical Engineering, 2009, 25, .	2.3	7
162	Modeling and Analysis of Novel Reactive HiGee Distillation. Computer Aided Chemical Engineering, 2012, , 1201-1205.	0.3	7

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