

Gade P. Rangaiah

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

276
papers

4,448
citations

37
h-index

53
g-index

291
ext. papers

5,143
ext. citations

3.9
avg, IF

6.16
L-index

#	Paper	IF	Citations
276	Photocatalytic Degradation of Methylene Blue by Titanium Dioxide: Experimental and Modeling Study. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 14641-14649	3.9	117
275	Multiobjective Optimization of Steam Reformer Performance Using Genetic Algorithm. <i>Industrial & Engineering Chemistry Research</i> , 2000 , 39, 706-717	3.9	110
274	Retrofitting conventional column systems to dividing-Wall Columns. <i>Chemical Engineering Research and Design</i> , 2009 , 87, 47-60	5.5	107
273	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	3.9	96
272	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	10.7	96
271	Multi-objective optimization of industrial hydrogen plants. <i>Chemical Engineering Science</i> , 2001 , 56, 999-1010	10.1	96
270	Evaluation of genetic algorithms and simulated annealing for phase equilibrium and stability problems. <i>Fluid Phase Equilibria</i> , 2001 , 187-188, 83-109	2.5	84
269	An improved multi-objective differential evolution with a termination criterion for optimizing chemical processes. <i>Computers and Chemical Engineering</i> , 2013 , 56, 155-173	4	71
268	Differential Evolution with Tabu List for Solving Nonlinear and Mixed-Integer Nonlinear Programming Problems. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 7126-7135	3.9	68
267	Tabu search for global optimization of continuous functions with application to phase equilibrium calculations. <i>Computers and Chemical Engineering</i> , 2003 , 27, 1665-1679	4	68
266	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	3.7	65
265	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	3.9	65
264	Review of Heat Exchanger Network Retrofitting Methodologies and Their Applications. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 11205-11220	3.9	62
263	Multiobjective Optimization of an Industrial Ethylene Reactor Using a Nondominated Sorting Genetic Algorithm. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 124-141	3.9	60
262	Plantwide Control of Industrial Processes: An Integrated Framework of Simulation and Heuristics. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 8300-8313	3.9	60
261	Multi-objective optimization using MS Excel with an application to design of a falling-film evaporator system. <i>Food and Bioprocesses Processing</i> , 2012 , 90, 123-134	4.9	59
260	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	3.9	59

259	Modeling, Simulation, and Multi-objective Optimization of an Industrial Hydrocracking Unit. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 1354-1372	3.9	57
258	Multi-objective optimization of two alkali catalyzed processes for biodiesel from waste cooking oil. <i>Energy Conversion and Management</i> , 2014 , 85, 361-372	10.6	56
257	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	5.8	55
256	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	5.5	55
255	Multiobjective optimization of an industrial styrene reactor. <i>Computers and Chemical Engineering</i> , 2003 , 27, 111-130	4	53
254	Advanced Control Strategies for the Regulation of Hypnosis with Propofol. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 3880-3897	3.9	51
253	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	5.4	50
252	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	8.3	48
251	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	4	48
250	First-Principles, Data-Based, and Hybrid Modeling and Optimization of an Industrial Hydrocracking Unit. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 7807-7816	3.9	48
249	Review and Analysis of Blood Glucose (BG) Models for Type 1 Diabetic Patients. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 12041-12066	3.9	47
248	Multiobjective optimization of an industrial styrene monomer manufacturing process. <i>Chemical Engineering Science</i> , 2005 , 60, 347-363	4.4	47
247	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	5.5	46
246	Multi-objective optimization of a bio-diesel production process. <i>Fuel</i> , 2013 , 103, 269-277	7.1	46
245	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	4.4	46
244	Review of Technological Advances in Bioethanol Recovery and Dehydration. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 5147-5163	3.9	44
243	When to use cascade control. <i>Industrial & Engineering Chemistry Research</i> , 1990 , 29, 2163-2166	3.9	44
242	Novel bare-bones particle swarm optimization and its performance for modeling vapor-liquid equilibrium data. <i>Fluid Phase Equilibria</i> , 2011 , 301, 33-45	2.5	41

241	Performance analysis of ultraviolet water disinfection reactors using computational fluid dynamics simulation. <i>Chemical Engineering Journal</i> , 2013 , 221, 398-406	14.7	38
240	Application and Evaluation of Three Methodologies for Plantwide Control of the Styrene Monomer Plant. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 10941-10961	3.9	37
239	One-step approach for heat exchanger network retrofitting using integrated differential evolution. <i>Computers and Chemical Engineering</i> , 2013 , 50, 92-104	4	36
238	Operator training simulators in the chemical industry: review, issues, and future directions. <i>Reviews in Chemical Engineering</i> , 2014 , 30,	5	36
237	Optimal Design of a Rotating Packed Bed for VOC Stripping from Contaminated Groundwater. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 835-847	3.9	35
236	An adaptive internal model control strategy for pH neutralization. <i>Chemical Engineering Science</i> , 1997 , 52, 3067-3074	4.4	34
235	Robust PID Controller for Blood Glucose Regulation in Type I Diabetics. <i>Industrial & Engineering Chemistry Research</i> , 2004 , 43, 8257-8268	3.9	34
234	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	3.9	33
233	A simple and effective procedure for control degrees of freedom. <i>Chemical Engineering Science</i> , 2006 , 61, 1184-1194	4.4	32
232	Evaluation of stochastic global optimization methods for modeling vapor-liquid equilibrium data. <i>Fluid Phase Equilibria</i> , 2010 , 287, 111-125	2.5	31
231	Implementation and evaluation of random tunneling algorithm for chemical engineering applications. <i>Computers and Chemical Engineering</i> , 2006 , 30, 1400-1415	4	31
230	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	4.4	30
229	An efficient constraint handling method with integrated differential evolution for numerical and engineering optimization. <i>Computers and Chemical Engineering</i> , 2012 , 37, 74-88	4	30
228	Optimization of Recovery Processes for Multiple Economic and Environmental Objectives. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 7662-7681	3.9	30
227	Multi-objective optimization of an industrial penicillin V bioreactor train using non-dominated sorting genetic algorithm. <i>Biotechnology and Bioengineering</i> , 2007 , 98, 586-98	4.9	30
226	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	8.3	29
225	Inherent Safety Analysis of a Propane Precooled Gas-Phase Liquified Natural Gas Process. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 4917-4927	3.9	29
224	Multi-Objective Optimization Applications in Chemical Process Engineering: Tutorial and Review. <i>Processes</i> , 2020 , 8, 508	2.9	28

223	Improved heat exchanger network retrofitting using exchanger reassignment strategies and multi-objective optimization. <i>Energy</i> , 2014 , 67, 584-594	7.9	28
222	Constrained and unconstrained Gibbs free energy minimization in reactive systems using genetic algorithm and differential evolution with tabu list. <i>Fluid Phase Equilibria</i> , 2011 , 300, 120-134	2.5	27
221	Plantwide Control System Design and Performance Evaluation for Ammonia Synthesis Process. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 12538-12547	3.9	27
220	Anti-windup schemes for uncertain nonlinear systems. <i>IET Control Theory and Applications</i> , 2000 , 147, 321-329		24
219	Process Development, Assessment, and Control of Reactive Dividing-Wall Column with Vapor Recompression for Producing n-Propyl Acetate. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 276-295	3.9	24
218	Retrofitting of heat exchanger networks involving streams with variable heat capacity: Application of single and multi-objective optimization. <i>Applied Thermal Engineering</i> , 2015 , 75, 677-684	5.8	23
217	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	3.9	23
216	Modeling and analysis of solid catalyzed reactive HiGee stripping. <i>Chemical Engineering Science</i> , 2012 , 80, 242-252	4.4	22
215	Evaluation of integrated differential evolution and unified bare-bones particle swarm optimization for phase equilibrium and stability problems. <i>Fluid Phase Equilibria</i> , 2011 , 310, 129-141	2.5	22
214	Criteria for Performance Assessment of Plantwide Control Systems. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 9209-9221	3.9	22
213	Simulation and Multiobjective Optimization of an Industrial Hydrogen Plant Based on Refinery Off-Gas. <i>Industrial & Engineering Chemistry Research</i> , 2002 , 41, 2248-2261	3.9	22
212	Adaptive internal model control of nonlinear processes. <i>Chemical Engineering Science</i> , 1999 , 54, 1205-1220	4.4	22
211	Estimating Second-Order plus Dead Time Model Parameters. <i>Industrial & Engineering Chemistry Research</i> , 1994 , 33, 1867-1871	3.9	22
210	Multi-Objective Optimization. <i>Advances in Process Systems Engineering</i> , 2008 ,		22
209	Heat-pump assisted distillation versus double-effect distillation for bioethanol recovery followed by pressure swing adsorption for bioethanol dehydration. <i>Separation and Purification Technology</i> , 2019 , 210, 574-586	8.3	20
208	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	10.7	20
207	Phase and chemical equilibrium calculations by direct search optimization. <i>Computers and Chemical Engineering</i> , 1999 , 23, 1183-1191	4	20
206	Holistic Approach for Retrofit Design of Cooling Water Networks. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 13059-13078	3.9	19

205	A regional blood flow model for β_2 -microglobulin kinetics and for simulating intra-dialytic exercise effect. <i>Annals of Biomedical Engineering</i> , 2011 , 39, 2879-90	4.7	19
204	Multiobjective Optimization of an Industrial LPG Thermal Cracker using a First Principles Model. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 9523-9533	3.9	19
203	A Comparative Study of Recent/Popular PID Tuning Rules for Stable, First-Order Plus Dead Time, Single-Input Single-Output Processes. <i>Industrial & Engineering Chemistry Research</i> , 2008 , 47, 344-368	3.9	19
202	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	3.0	19
201	Application of a plant-wide control design to the HDA process. <i>Computers and Chemical Engineering</i> , 2003 , 27, 73-94	4	19
200	Operator training simulator for biodiesel synthesis from waste cooking oil. <i>Chemical Engineering Research and Design</i> , 2016 , 99, 55-68	5.5	18
199	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	3.9	18
198	Identification and predictive control of a multistage evaporator. <i>Control Engineering Practice</i> , 2010 , 18, 1418-1428	3.9	18
197	A method for multiphase equilibrium calculations. <i>Computers and Chemical Engineering</i> , 1998 , 22, 897-914	4	18
196	Closed-loop tuning of process control systems. <i>Chemical Engineering Science</i> , 1987 , 42, 2173-2182	4.4	18
195	Optimizing reboiler duty and reflux ratio profiles of vapor recompressed batch distillation. <i>Separation and Purification Technology</i> , 2019 , 213, 553-570	8.3	18
194	Development and Multiobjective Optimization of Improved Cumene Production Processes. <i>Materials and Manufacturing Processes</i> , 2015 , 30, 444-457	4.1	17
193	Multi-Objective Optimization Applications in Chemical Engineering 2013 , 35-102		17
192	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	3.9	17
191	Modeling and optimization of a multi-product biosynthesis factory for multiple objectives. <i>Metabolic Engineering</i> , 2010 , 12, 251-67	9.7	17
190	Studies in constrained optimization of chemical process problems. <i>Computers and Chemical Engineering</i> , 1985 , 9, 395-404	4	17
189	Process Retrofitting via Intensification: A Heuristic Methodology and Its Application to Isopropyl Alcohol Process. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 3614-3629	3.9	16
188	Multiobjective Optimization of Cold-End Separation Process in an Ethylene Plant. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 17229-17240	3.9	16

187	Improving energy efficiency of distillation using heat pump assisted columns. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2014 , 9, 905-928	1.3	16
186	Investigating the trade-off between operating revenue and CO2 emissions from crude oil distillation using a blend of two crudes. <i>Fuel</i> , 2011 , 90, 3577-3585	7.1	16
185	Performance Assessment of Plantwide Control Systems of Industrial Processes. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 1220-1231	3.9	16
184	A study of finding many desirable solutions in multiobjective optimization of chemical processes. <i>Computers and Chemical Engineering</i> , 2007 , 31, 1257-1271	4	16
183	Experimental evaluation of an augmented IMC for nonlinear systems. <i>Control Engineering Practice</i> , 2000 , 8, 1167-1176	3.9	16
182	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	4.2	15
181	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	5.5	14
180	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	3.9	14
179	A Simplified Procedure for Quick Design of Dividing-Wall Columns for Industrial Applications. <i>Chemical Product and Process Modeling</i> , 2009 , 4,	1.1	14
178	Closed-Loop Identification of TITO Processes Using Time-Domain Curve Fitting and Genetic Algorithms. <i>Industrial & Engineering Chemistry Research</i> , 2001 , 40, 2818-2826	3.9	14
177	Application of time domain curve-fitting to parameter estimation in RTD models.. <i>Journal of Chemical Engineering of Japan</i> , 1990 , 23, 124-130	0.8	14
176	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	4	13
175	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	3.9	13
174	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	2.5	13
173	Integrated Framework Incorporating Optimization for Plant-Wide Control of Industrial Processes. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 8122-8137	3.9	13
172	Economic and Environmental Criteria and Trade-Offs for Recovery Processes. <i>Materials and Manufacturing Processes</i> , 2011 , 26, 431-445	4.1	13
171	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	3.9	13
170	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	5.8	12

169	Process Optimization of Heat-Integrated Extractive Dividing-Wall Columns for Energy-Saving Separation of CO ₂ and Hydrocarbons. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 11000-11011	3.9	12
168	Designing, Retrofitting, and Revamping Water Networks in Petroleum Refineries Using Multiobjective Optimization. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 226-236	3.9	12
167	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	5.5	12
166	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	2.2	12
165	HiGee Stripper-Membrane System for Decentralized Bioethanol Recovery and Purification. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 4572-4585	3.9	12
164	Modeling and Analysis of Hybrid Reactive Stripper-Membrane Process for Lactic Acid Recovery. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 2907-2916	3.9	12
163	A Molecular-Based Model for Normal Fluid Mixtures: Perturbed Lennard-Jones Chain Equation of State. <i>Industrial & Engineering Chemistry Research</i> , 2000 , 39, 1497-1504	3.9	12
162	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	3.9	12
161	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	3.9	11
160	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	2.5	11
159	A Time Delay Compensation Strategy for Uncertain Single-Input Single-Output Nonlinear Processes. <i>Industrial & Engineering Chemistry Research</i> , 1999 , 38, 4309-4316	3.9	11
158	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	3.7	10
157	Vapor recompressed batch distillation: Optimizing reflux ratio at variable mode. <i>Computers and Chemical Engineering</i> , 2019 , 124, 184-196	4	10
156	Energy optimization of crude oil distillation using different designs of pre-flash drums. <i>Applied Thermal Engineering</i> , 2014 , 73, 1204-1210	5.8	10
155	Comparison of toxin removal outcomes in online hemodiafiltration and intra-dialytic exercise in high-flux hemodialysis: a prospective randomized open-label clinical study protocol. <i>BMC Nephrology</i> , 2012 , 13, 156	2.7	10
154	Attainment of PI Achievable Performance for Linear SISO Processes with Deadtime by Iterative Tuning. <i>Canadian Journal of Chemical Engineering</i> , 2008 , 83, 723-736	2.3	10
153	A method for simulation and optimization of multiphase distillation. <i>Computers and Chemical Engineering</i> , 2000 , 24, 23-37	4	10
152	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	5.5	10

151	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	3.9	10
150	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	3.5	9
149	Closed-loop identification and model predictive control of extractive dividing-wall column. <i>Chemical Engineering and Processing: Process Intensification</i> , 2019 , 142, 107552	3.7	9
148	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	3.9	9
147	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	3.9	9
146	Multi-objective Optimization of Heat Integrated Water Networks in Petroleum Refineries. <i>Computer Aided Chemical Engineering</i> , 2014 , 33, 1531-1536	0.6	9
145	A hybrid global optimization algorithm and its application to parameter estimation problems. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2011 , 6, 379-390	1.3	9
144	Use of alternate process variables for enhancing pH control performance. <i>Chemical Engineering Science</i> , 1998 , 53, 3041-3049	4.4	9
143	Control degrees of freedom using the restraining number: further evaluation. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2008 , 3, 638-647	1.3	9
142	Internal model control with feedback compensation for uncertain non-linear systems. <i>International Journal of Control</i> , 2001 , 74, 1456-1466	1.5	9
141	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	2.5	9
140	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	3.5	9
139	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	5.5	8
138	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	10.3	8
137	Economic Plantwide Control 2012 , 229-251		8
136	Robust controller synthesis for multivariable nonlinear systems with unmeasured disturbances. <i>Chemical Engineering Science</i> , 2004 , 59, 977-986	4.4	8
135	Process Identification from Closed-Loop Response Using Optimization Methods. <i>Chemical Engineering Research and Design</i> , 2000 , 78, 528-541	5.5	8
134	Triple-Objective Optimization of an Industrial Hydrogen Plant.. <i>Journal of Chemical Engineering of Japan</i> , 2001 , 34, 1341-1355	0.8	8

133	Plant-Wide Control System Design of an Alkylation Process Using Integrated Framework of Simulation, Heuristics, and Optimization. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 2887-2906	2.9	7
132	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	2.3	7
131	Modeling and Analysis of Novel Reactive HiGee Distillation. <i>Computer Aided Chemical Engineering</i> , 2012 , 1201-1205	0.6	7
130	Modeling and Optimization of Reactive HiGee Stripper-Membrane Process for Methyl Lactate Hydrolysis. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 7795-7802	3.9	7
129	Plant-Wide Control: Methodologies and Applications. <i>Reviews in Chemical Engineering</i> , 2009 , 25,	5	7
128	A comparative study of three advanced controllers for the regulation of hypnosis. <i>Journal of Process Control</i> , 2009 , 19, 1458-1469	3.9	7
127	A method for calculation of vapor-liquid and liquid-liquid equilibria. <i>Computers and Chemical Engineering</i> , 1997 , 21, 905-913	4	7
126	Pervaporation of Water and Ethanol Using a Cellulose Acetate Butyrate Membrane. <i>Journal of Colloid and Interface Science</i> , 1993 , 160, 502-504	9.3	7
125	Effect of gas evolution on dispersion in an electrochemical reactor. <i>Journal of Applied Electrochemistry</i> , 1993 , 23, 113	2.6	7
124	Comparison of two algorithms for solving STIFF differential equations. <i>Computers and Structures</i> , 1985 , 20, 915-920	4.5	7
123	Data analysis, modeling and control performance enhancement of an industrial fluid catalytic cracking unit. <i>Chemical Engineering Science</i> , 2007 , 62, 1958-1973	4.4	6
122	Enhanced IMC for Glucose Control in Type I Diabetics Using a Detailed Physiological Model. <i>Food and Bioproducts Processing</i> , 2006 , 84, 227-236	4.9	6
121	Set point weighting for simplified model predictive control. <i>The Chemical Engineering Journal</i> , 1992 , 50, 159-163		6
120	Strategies for Enhancing Nonlinear Internal Model Control of pH Processes.. <i>Journal of Chemical Engineering of Japan</i> , 1999 , 32, 59-68	0.8	6
119	Integrated Biorefinery of Empty Fruit Bunch from Palm Oil Industries to Produce Valuable Biochemicals. <i>Processes</i> , 2020 , 8, 868	2.9	6
118	Plantwide Control of the Formic Acid Production Process Using an Integrated Framework of Simulation and Heuristics. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 13478-13489	3.9	6
117	Effect of cool vs. warm dialysate on toxin removal: rationale and study design. <i>BMC Nephrology</i> , 2015 , 16, 25	2.7	5
116	Retrofitting an isopropanol process based on reactive distillation and propylene-propane separation. <i>Chemical Engineering and Processing: Process Intensification</i> , 2016 , 108, 164-173	3.7	5

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