Fengqi You

List of Publications by Citations

307 papers	11,106 citations	58 h-index	95 g-index
347 ext. papers	13,548 ext. citations	5.4 avg, IF	7.67 L-index

#	Paper	IF	Citations
307	Biomass-to-bioenergy and biofuel supply chain optimization: Overview, key issues and challenges. *Computers and Chemical Engineering*, **2014**, 66, 36-56	4	485
306	Optimal design of sustainable cellulosic biofuel supply chains: Multiobjective optimization coupled with life cycle assessment and input–output analysis. *AICHE Journal*, **2012**, 58, 1157-1180	3.6	474
305	The case for organic photovoltaics. *RSC Advances*, **2013**, 3, 17633	3.7	442
304	Perovskite photovoltaics: life-cycle assessment of energy and environmental impacts. *Energy and Environmental Science*, **2015**, 8, 1953-1968	35.4	355
303	Life Cycle Optimization of Biomass-to-Liquid Supply Chains with Distributed–Centralized Processing Networks. *Industrial & Engineering Chemistry Research*, **2011**, 50, 10102-10127	3.9	262
302	Assumptions and the levelized cost of energy for photovoltaics. *Energy and Environmental Science*, **2011**, 4, 3133	35.4	249
301	Design under uncertainty of hydrocarbon biorefinery supply chains: Multiobjective stochastic programming models, decomposition algorithm, and a Comparison between CVaR and downside risk. *AICHE Journal*, **2012**, 58, 2155-2179	3.6	180
300	Supply chain design and optimization: Challenges and opportunities. *Computers and Chemical Engineering*, **2015**, 81, 153-170	4	177
299	The water-energy-food nexus and process systems engineering: A new focus. *Computers and Chemical Engineering*, **2016**, 91, 49-67	4	174
298	Design of responsive supply chains under demand uncertainty. *Computers and Chemical Engineering*, **2008**, 32, 3090-3111	4	174
297	In silico discovery of metal-organic frameworks for precombustion CO capture using a genetic algorithm. *Science Advances*, **2016**, 2, e1600909	14.3	164
296	Risk management for a global supply chain planning under uncertainty: Models and algorithms. *AICHE Journal*, **2009**, 55, 931-946	3.6	162
295	Sustainable design and synthesis of hydrocarbon biorefinery via gasification pathway: Integrated life cycle assessment and technoeconomic analysis with multiobjective superstructure optimization. *Computers and Chemical Engineering*, **2013**, 52, 55-76	4	153
294	Design of Sustainable Product Systems and Supply Chains with Life Cycle Optimization Based on Functional Unit: General Modeling Framework, Mixed-Integer Nonlinear Programming Algorithms and Case Study on Hydrocarbon Biofuels. *ACS Sustainable Chemistry and Engineering*, **2013**, 1, 1003-1014	8.3	135
293	Shale Gas Supply Chain Design and Operations toward Better Economic and Life Cycle Environmental Performance: MINLP Model and Global Optimization Algorithm. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 1282-1291	8.3	124
292	Life cycle optimization for sustainable design and operations of hydrocarbon biorefinery via fast pyrolysis, hydrotreating and hydrocracking. *Computers and Chemical Engineering*, **2013**, 50, 71-91	4	121
291	Sustainable design and synthesis of algae-based biorefinery for simultaneous hydrocarbon biofuel production and carbon sequestration. *AICHE Journal*, **2013**, 59, 1599-1621	3.6	116

290	Shale Gas Processing Integrated with Ethylene Production: Novel Process Designs, Exergy Analysis, and Techno-Economic Analysis. *Industrial & Engineering Chemistry Research*, **2014**, 53, 11442-11459	3.9	111
289	Global optimization for sustainable design and synthesis of algae processing network for CO2 mitigation and biofuel production using life cycle optimization. *AICHE Journal*, **2014**, 60, 3195-3210	3.6	110
288	Optimal design and operations of supply chain networks for water management in shale gas production: MILFP model and algorithms for the water-energy nexus. *AICHE Journal*, **2015**, 61, 1184-1208	3.6	107
287	Game-theoretic modeling and optimization of multi-echelon supply chain design and operation under Stackelberg game and market equilibrium. *Computers and Chemical Engineering*, **2014**, 71, 347-361	4	105
286	Domestic and overseas manufacturing scenarios of silicon-based photovoltaics: Life cycle energy and environmental comparative analysis. *Solar Energy*, **2014**, 105, 669-678	6.8	103
285	Mixed-Integer Nonlinear Programming Models and Algorithms for Large-Scale Supply Chain Design with Stochastic Inventory Management. *Industrial & Engineering Chemistry Research*, **2008**, 47, 7802-7817	3.9	102
284	Global carbon intensity of crude oil production. *Science*, **2018**, 361, 851-853	33.3	100
283	Optimization under uncertainty in the era of big data and deep learning: When machine learning meets mathematical programming. *Computers and Chemical Engineering*, **2019**, 125, 434-448	4	96
282	Sustainable Design and Operation of Cellulosic Bioelectricity Supply Chain Networks with Life Cycle Economic, Environmental, and Social Optimization. *Industrial & Engineering Chemistry Research*, **2014**, 53, 4008-4029	3.9	96
281	Optimal Design and Synthesis of Algal Biorefinery Processes for Biological Carbon Sequestration and Utilization with Zero Direct Greenhouse Gas Emissions: MINLP Model and Global Optimization Algorithm. *Industrial & Engineering Chemistry Research*, **2014**, 53, 1563-1579	3.9	94
280	Sustainable design and synthesis of energy systems. *Current Opinion in Chemical Engineering*, **2015**, 10, 77-86	5.4	91
279	Integration of scheduling and control with online closed-loop implementation: Fast computational strategy and large-scale global optimization algorithm. *Computers and Chemical Engineering*, **2012**, 47, 248-268	4	91
278	Value-Added Chemicals from Microalgae: Greener, More Economical, or Both?. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 82-96	8.3	88
277	Robust design and operations of hydrocarbon biofuel supply chain integrating with existing petroleum refineries considering unit cost objective. *Computers and Chemical Engineering*, **2014**, 68, 128-139	4	88
276	Data Analytics and Machine Learning for Smart Process Manufacturing: Recent Advances and Perspectives in the Big Data Era. *Engineering*, **2019**, 5, 1010-1016	9.7	85
275	Deciphering the uncertainties in life cycle energy and environmental analysis of organic photovoltaics. *Energy and Environmental Science*, **2012**, 5, 9163	35.4	85
274	Data-driven adaptive nested robust optimization: General modeling framework and efficient computational algorithm for decision making under uncertainty. *AICHE Journal*, **2017**, 63, 3790-3817	3.6	83
273	Stochastic inventory management for tactical process planning under uncertainties: MINLP models and algorithms. *AICHE Journal*, **2011**, 57, 1250-1277	3.6	82

272	Optimal design of advanced drop-in hydrocarbon biofuel supply chain integrating with existing petroleum refineries under uncertainty. *Biomass and Bioenergy*, **2014**, 60, 108-120	5.3	79
271	Multiobjective optimization of product and process networks: General modeling framework, efficient global optimization algorithm, and case studies on bioconversion. *AICHE Journal*, **2015**, 61, 530-554	3.6	76
270	Data-driven robust optimization based on kernel learning. *Computers and Chemical Engineering*, **2017**, 106, 464-479	4	76
269	Data-driven decision making under uncertainty integrating robust optimization with principal component analysis and kernel smoothing methods. *Computers and Chemical Engineering*, **2018**, 112, 190-210	4	74
268	Dinkelbach's algorithm as an efficient method to solve a class of MINLP models for large-scale cyclic scheduling problems. *Computers and Chemical Engineering*, **2009**, 33, 1879-1889	4	74
267	Design and optimization of shale gas energy systems: Overview, research challenges, and future directions. *Computers and Chemical Engineering*, **2017**, 106, 699-718	4	69
266	A data-driven multistage adaptive robust optimization framework for planning and scheduling under uncertainty. *AICHE Journal*, **2017**, 63, 4343-4369	3.6	69
265	Planning and scheduling of flexible process networks under uncertainty with stochastic inventory: MINLP models and algorithm. *AICHE Journal*, **2013**, 59, 1511-1532	3.6	69
264	Integration of production scheduling and dynamic optimization for multi-product CSTRs: Generalized Benders decomposition coupled with global mixed-integer fractional programming. *Computers and Chemical Engineering*, **2013**, 58, 315-333	4	69
263	Stackelberg-game-based modeling and optimization for supply chain design and operations: A mixed integer bilevel programming framework. *Computers and Chemical Engineering*, **2017**, 102, 81-95	4	69
262	Comparative Techno-Economic and Environmental Analysis of Ethylene and Propylene Manufacturing from Wet Shale Gas and Naphtha. *Industrial & Engineering Chemistry Research*, **2017**, 56, 4038-4051	3.9	68
261	Integrating Hybrid Life Cycle Assessment with Multiobjective Optimization: A Modeling Framework. *Environmental Science & Technology*, **2016**, 50, 1501-9	10.3	68
260	Stochastic Programming Approach to Optimal Design and Operations of Integrated Hydrocarbon Biofuel and Petroleum Supply Chains. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 49-61	8.3	68
259	Active disturbance rejection temperature control of open-cathode proton exchange membrane fuel cell. *Applied Energy*, **2020**, 261, 114381	10.7	68
258	Model-based integration of control and operations: Overview, challenges, advances, and opportunities. *Computers and Chemical Engineering*, **2015**, 83, 2-20	4	66
257	Multicut Benders decomposition algorithm for process supply chain planning under uncertainty. *Annals of Operations Research*, **2013**, 210, 191-211	3.2	66
256	Unraveling Optimal Biomass Processing Routes from Bioconversion Product and Process Networks under Uncertainty: An Adaptive Robust Optimization Approach. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 3160-3173	8.3	66
255	Integrated planning and scheduling under production uncertainties: Bi-level model formulation and hybrid solution method. *Computers and Chemical Engineering*, **2015**, 72, 255-272	4	64

254	Oil spill response planning with consideration of physicochemical evolution of the oil slick: A multiobjective optimization approach. *Computers and Chemical Engineering*, **2011**, 35, 1614-1630	4	64
253	Data-driven stochastic robust optimization: General computational framework and algorithm leveraging machine learning for optimization under uncertainty in the big data era. *Computers and Chemical Engineering*, **2018**, 111, 115-133	4	61
252	Distributionally robust optimization for planning and scheduling under uncertainty. *Computers and Chemical Engineering*, **2018**, 110, 53-68	4	60
251	Deciphering and handling uncertainty in shale gas supply chain design and optimization: Novel modeling framework and computationally efficient solution algorithm. *AICHE Journal*, **2015**, 61, 3739-3755	3.6	60
250	Toward more cost-effective and greener chemicals production from shale gas by integrating with bioethanol dehydration: Novel process design and simulation-based optimization. *AICHE Journal*, **2015**, 61, 1209-1232	3.6	59
249	Optimal supply chain design and operations under multi-scale uncertainties: Nested stochastic robust optimization modeling framework and solution algorithm. *AICHE Journal*, **2016**, 62, 3041-3055	3.6	58
248	How to assess the potential of emerging green technologies? Towards a prospective environmental and techno-economic assessment framework. *Green Chemistry*, **2019**, 21, 4868-4886	10	56
247	Can renewable generation, energy storage and energy efficient technologies enable carbon neutral energy transition?. *Applied Energy*, **2020**, 279, 115889	10.7	56
246	A computational framework and solution algorithms for two-stage adaptive robust scheduling of batch manufacturing processes under uncertainty. *AICHE Journal*, **2016**, 62, 687-703	3.6	55
245	Optimization of Two-Stage Pressure/Vacuum Swing Adsorption with Variable Dehydration Level for Postcombustion Carbon Capture. *Industrial & Engineering Chemistry Research*, **2016**, 55, 3338-3350	3.9	55
244	Data-Driven Adaptive Robust Unit Commitment Under Wind Power Uncertainty: A Bayesian Nonparametric Approach. *IEEE Transactions on Power Systems*, **2019**, 34, 2409-2418	7	55
243	Deciphering the true life cycle environmental impacts and costs of the mega-scale shale gas-to-olefins projects in the United States. *Energy and Environmental Science*, **2016**, 9, 820-840	35.4	53
242	Globally convergent exact and inexact parametric algorithms for solving large-scale mixed-integer fractional programs and applications in process systems engineering. *Computers and Chemical Engineering*, **2014**, 61, 90-101	4	53
241	Systems design and analysis of liquid air energy storage from liquefied natural gas cold energy. *Applied Energy*, **2019**, 242, 168-180	10.7	51
240	Sustainable scheduling of batch processes under economic and environmental criteria with MINLP models and algorithms. *Computers and Chemical Engineering*, **2013**, 54, 44-59	4	51
239	Structure and adsorption of a hard-core multi-Yukawa fluid confined in a slitlike pore: grand canonical Monte Carlo simulation and density functional study. *Journal of Physical Chemistry B*, **2006**, 110, 334-41	3.4	50
238	Optimal processing network design under uncertainty for producing fuels and value-added bioproducts from microalgae: Two-stage adaptive robust mixed integer fractional programming model and computationally efficient solution algorithm. *AICHE Journal*, **2017**, 63, 582-600	3.6	49
237	Addressing the operational challenges in the development, manufacture, and supply of advanced materials and performance products. *Computers and Chemical Engineering*, **2012**, 47, 157-169	4	49

236	Development of a General Evaluation Metric for Rapid Screening of Adsorbent Materials for Postcombustion CO2 Capture. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 11529-11539	8.3	48
235	Systems engineering opportunities for agricultural and organic waste management in the food□water□energy nexus. *Current Opinion in Chemical Engineering*, **2017**, 18, 23-31	5.4	48
234	Economic and Environmental Life Cycle Optimization of Noncooperative Supply Chains and Product Systems: Modeling Framework, Mixed-Integer Bilevel Fractional Programming Algorithm, and Shale Gas Application. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 3362-3381	8.3	47
233	Systems analysis, design, and optimization of geothermal energy systems for power production and polygeneration: State-of-the-art and future challenges. *Renewable and Sustainable Energy Reviews*, **2019**, 109, 551-577	16.2	46
232	Consequential Life Cycle Optimization: General Conceptual Framework and Application to Algal Renewable Diesel Production. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 5887-5911	8.3	46
231	Computational Screening of Nanoporous Materials for Hexane and Heptane Isomer Separation. *Chemistry of Materials*, **2017**, 29, 6315-6328	9.6	46
230	Global optimization of large-scale mixed-integer linear fractional programming problems: A reformulation-linearization method and process scheduling applications. *AICHE Journal*, **2013**, 59, 4255-4272	3.6	46
229	Game theory approach to optimal design of shale gas supply chains with consideration of economics and life cycle greenhouse gas emissions. *AICHE Journal*, **2017**, 63, 2671-2693	3.6	45
228	Fair profit allocation in supply chain optimization with transfer price and revenue sharing: MINLP model and algorithm for cellulosic biofuel supply chains. *AICHE Journal*, **2014**, 60, 3211-3229	3.6	44
227	Combined internal resistance and state-of-charge estimation of lithium-ion battery based on extended state observer. *Renewable and Sustainable Energy Reviews*, **2020**, 131, 109994	16.2	44
226	Quantum computing for energy systems optimization: Challenges and opportunities. *Energy*, **2019**, 179, 76-89	7.9	43
225	Simulation-based optimization framework for multi-echelon inventory systems under uncertainty. *Computers and Chemical Engineering*, **2015**, 73, 1-16	4	43
224	Modular methanol manufacturing from shale gas: Techno-economic and environmental analyses of conventional large-scale production versus small-scale distributed, modular processing. *AICHE Journal*, **2018**, 64, 495-510	3.6	43
223	Quantum computing based hybrid solution strategies for large-scale discrete-continuous optimization problems. *Computers and Chemical Engineering*, **2020**, 132, 106630	4	42
222	A data-driven robust optimization approach to scenario-based stochastic model predictive control. *Journal of Process Control*, **2019**, 75, 24-39	3.9	42
221	Integration of Scheduling and Dynamic Optimization of Batch Processes under Uncertainty: Two-Stage Stochastic Programming Approach and Enhanced Generalized Benders Decomposition Algorithm. *Industrial & Engineering Chemistry Research*, **2013**, 52, 16851-16869	3.9	41
220	Optimal Distribution-Inventory Planning of Industrial Gases. II. MINLP Models and Algorithms for Stochastic Cases. *Industrial & Engineering Chemistry Research*, **2011**, 50, 2928-2945	3.9	41
219	Structure of inhomogeneous attractive and repulsive hard-core yukawa fluid: grand canonical Monte Carlo simulation and density functional theory study. *Journal of Physical Chemistry B*, **2005**, 109, 3512-8	3.4	41

218	Efficient scheduling method of complex batch processes with general network structure via agent-based modeling. *AICHE Journal*, **2013**, 59, 2884-2906	3.6	40
217	Multisite Capacity, Production, and Distribution Planning with Reactor Modifications: MILP Model, Bilevel Decomposition Algorithm versus Lagrangean Decomposition Scheme. *Industrial & Engineering Chemistry Research*, **2011**, 50, 4831-4849	3.9	40
216	Resilient design and operations of process systems: Nonlinear adaptive robust optimization model and algorithm for resilience analysis and enhancement. *Computers and Chemical Engineering*, **2018**, 116, 231-252	4	40
215	A new superstructure optimization paradigm for process synthesis with product distribution optimization: Application to an integrated shale gas processing and chemical manufacturing process. *AICHE Journal*, **2018**, 64, 123-143	3.6	39
214	Considering agricultural wastes and ecosystem services in Food-Energy-Water-Waste Nexus system design. *Journal of Cleaner Production*, **2019**, 228, 941-955	10.3	38
213	A novel cryogenic energy storage system with LNG direct expansion regasification: Design, energy optimization, and exergy analysis. *Energy*, **2019**, 173, 691-705	7.9	38
212	Sustainable process design and synthesis of hydrocarbon biorefinery through fast pyrolysis and hydroprocessing. *AICHE Journal*, **2014**, 60, 980-994	3.6	38
211	Integrated Scheduling and Dynamic Optimization of Complex Batch Processes with General Network Structure Using a Generalized Benders Decomposition Approach. *Industrial & Engineering Chemistry Research*, **2013**, 52, 7867-7885	3.9	38
210	Process systems engineering The generation next?. *Computers and Chemical Engineering*, **2021**, 147, 107252	4	38
209	Balancing responsiveness and economics in process supply chain design with multi-echelon stochastic inventory. *AICHE Journal*, **2011**, 57, 178-192	3.6	37
208	A systematic simulation-based process intensification method for shale gas processing and NGLs recovery process systems under uncertain feedstock compositions. *Computers and Chemical Engineering*, **2017**, 105, 259-275	4	35
207	Network-Based Life Cycle Optimization of the Net Atmospheric CO2-eq Ratio (NACR) of Fuels and Chemicals Production from Biomass. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 1732-1744	8.3	35
206	Deep learning and knowledge-based methods for computer-aided molecular design toward a unified approach: State-of-the-art and future directions. *Computers and Chemical Engineering*, **2020**, 141, 107005	4	35
205	Moving horizon approach of integrating scheduling and control for sequential batch processes. *AICHE Journal*, **2014**, 60, 1654-1671	3.6	35
204	Waste Polypropylene Plastic Recycling toward Climate Change Mitigation and Circular Economy: Energy, Environmental, and Technoeconomic Perspectives. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 16350-16363	8.3	35
203	Integrated Scheduling and Dynamic Optimization by Stackelberg Game: Bilevel Model Formulation and Efficient Solution Algorithm. *Industrial & Engineering Chemistry Research*, **2014**, 53, 5564-5581	3.9	34
202	Integrated Planning, Scheduling, and Dynamic Optimization for Batch Processes: MINLP Model Formulation and Efficient Solution Methods via Surrogate Modeling. *Industrial & Engineering Chemistry Research*, **2014**, 53, 13391-13411	3.9	34
201	Hybrid method integrating agent-based modeling and heuristic tree search for scheduling of complex batch processes. *Computers and Chemical Engineering*, **2014**, 60, 277-296	4	34

200	Manufacturing Ethylene from Wet Shale Gas and Biomass: Comparative Technoeconomic Analysis and Environmental Life Cycle Assessment. *Industrial & Engineering Chemistry Research*, **2018**, 57, 5980-5998	3.9	33
199	Structures and adsorption of binary hard-core Yukawa mixtures in a slitlike pore: grand canonical Monte Carlo simulation and density-functional study. *Journal of Chemical Physics*, **2005**, 123, 114705	3.9	33
198	110th Anniversary: Surrogate Models Based on Artificial Neural Networks To Simulate and Optimize Pressure Swing Adsorption Cycles for CO2 Capture. *Industrial & Engineering Chemistry Research*, **2019**, 58, 18241-18252	3.9	32
197	A computationally efficient simulation-based optimization method with region-wise surrogate modeling for stochastic inventory management of supply chains with general network structures. *Computers and Chemical Engineering*, **2016**, 87, 164-179	4	30
196	Integrated Scheduling and Dynamic Optimization of Sequential Batch Processes with Online Implementation. *AICHE Journal*, **2013**, 59, 2379-2406	3.6	30
195	Optimal Distribution-Inventory Planning of Industrial Gases. I. Fast Computational Strategies for Large-Scale Problems. *Industrial & Engineering Chemistry Research*, **2011**, 50, 2910-2927	3.9	30
194	Decentralized-distributed robust electric power scheduling for multi-microgrid systems. *Applied Energy*, **2020**, 269, 115146	10.7	30
193	Data-driven Wasserstein distributionally robust optimization for biomass with agricultural waste-to-energy network design under uncertainty. *Applied Energy*, **2019**, 255, 113857	10.7	29
192	Life cycle environmental and economic analysis of pulverized coal oxy-fuel combustion combining with calcium looping process or chemical looping air separation. *Journal of Cleaner Production*, **2018**, 181, 271-292	10.3	29
191	Biorefinery Supply Chain Network Design under Competitive Feedstock Markets: An Agent-Based Simulation and Optimization Approach. *Industrial & Engineering Chemistry Research*, **2014**, 53, 15111-15126	3.9	29
190	Resilient supply chain design and operations with decision-dependent uncertainty using a data-driven robust optimization approach. *AICHE Journal*, **2019**, 65, 1006-1021	3.6	29
189	Multicriteria Environmental and Economic Analysis of Municipal Solid Waste Incineration Power Plant with Carbon Capture and Separation from the Life-Cycle Perspective. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 937-956	8.3	29
188	Integrated Hybrid Life Cycle Assessment and Optimization of Shale Gas. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 1803-1824	8.3	28
187	Life cycle assessment of recycling strategies for perovskite photovoltaic modules. *Nature Sustainability*, **2021**, 4, 821-829	22.1	28
186	Carbon-neutral hybrid energy systems with deep water source cooling, biomass heating, and geothermal heat and power. *Applied Energy*, **2019**, 250, 413-432	10.7	27
185	Addressing global environmental impacts including land use change in life cycle optimization: Studies on biofuels. *Journal of Cleaner Production*, **2018**, 182, 313-330	10.3	27
184	Mixed-integer dynamic optimization for oil-spill response planning with integration of a dynamic oil weathering model. *AICHE Journal*, **2011**, 57, 3555-3564	3.6	27
183	Adaptive robust optimization with minimax regret criterion: Multiobjective optimization framework and computational algorithm for planning and scheduling under uncertainty. *Computers and Chemical Engineering*, **2018**, 108, 425-447	4	26

182	Comparative Life-Cycle Assessment of Li-Ion Batteries through Process-Based and Integrated Hybrid Approaches. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 5082-5094	8.3	26
181	Modeling framework and computational algorithm for hedging against uncertainty in sustainable supply chain design using functional-unit-based life cycle optimization. *Computers and Chemical Engineering*, **2017**, 107, 221-236	4	25
180	Synergies between Geological Sequestration and Microalgae Biofixation for Greenhouse Gas Abatement: Life Cycle Design of Carbon Capture, Utilization, and Storage Supply Chains. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 841-861	8.3	25
179	Life cycle energy use and environmental implications of high-performance perovskite tandem solar cells. *Science Advances*, **2020**, 6, eabb0055	14.3	25
178	Data-driven distributionally robust optimization of shale gas supply chains under uncertainty. *AICHE Journal*, **2019**, 65, 947-963	3.6	25
177	Robust Model Predictive Control of Irrigation Systems With Active Uncertainty Learning and Data Analytics. *IEEE Transactions on Control Systems Technology*, **2020**, 28, 1493-1504	4.8	25
176	Food-energy-water-waste nexus systems optimization for New York State under the COVID-19 pandemic to alleviate health and environmental concerns. *Applied Energy*, **2021**, 282, 116181	10.7	25
175	New York State's 100% renewable electricity transition planning under uncertainty using a data-driven multistage adaptive robust optimization approach with machine-learning. *Advances in Applied Energy*, **2021**, 2, 100019		24
174	Can Modular Manufacturing Be the Next Game-Changer in Shale Gas Supply Chain Design and Operations for Economic and Environmental Sustainability?. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 10046-10071	8.3	23
173	A novel hybrid feedstock to liquids and electricity process: Process modeling and exergoeconomic life cycle optimization. *AICHE Journal*, **2014**, 60, 3739-3753	3.6	23
172	Thermal and economic analysis of an energy system of an ORC coupled with vehicle air conditioning. *International Journal of Refrigeration*, **2016**, 64, 152-167	3.8	22
171	Novel Optimization Model and Efficient Solution Method for Integrating Dynamic Optimization with Process Operations of Continuous Manufacturing Processes. *Industrial & Engineering Chemistry Research*, **2015**, 54, 2167-2187	3.9	22
170	Economic Process Selection of Liquefied Natural Gas Regasification: Power Generation and Energy Storage Applications. *Industrial & Engineering Chemistry Research*, **2019**, 58, 4946-4956	3.9	21
169	Novel massive thermal energy storage system for liquefied natural gas cold energy recovery. *Energy*, **2020**, 195, 117022	7.9	21
168	Systems modeling, simulation and analysis for robust operations and improved design of entrained-flow pulverized coal gasifiers. *Energy*, **2018**, 148, 941-964	7.9	21
167	Process systems engineering thinking and tools applied to sustainability problems: current landscape and future opportunities. *Current Opinion in Chemical Engineering*, **2019**, 26, 170-179	5.4	21
166	Incorporating agricultural waste-to-energy pathways into biomass product and process network through data-driven nonlinear adaptive robust optimization. *Energy*, **2019**, 180, 556-571	7.9	20
165	Life Cycle Assessment and Technoeconomic Analysis of Thermochemical Conversion Technologies Applied to Poultry Litter with Energy and Nutrient Recovery. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 8436-8447	8.3	20

164	Poultry Waste Valorization via Pyrolysis Technologies: Economic and Environmental Life Cycle Optimization for Sustainable Bioenergy Systems. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 4633-4646	8.3	20
163	Operational optimization of industrial steam systems under uncertainty using data-Driven adaptive robust optimization. *AICHE Journal*, **2019**, 65, e16500	3.6	19
162	A projection-based reformulation and decomposition algorithm for global optimization of a class of mixed integer bilevel linear programs. *Journal of Global Optimization*, **2019**, 73, 27-57	1.5	18
161	Life Cycle Network Modeling Framework and Solution Algorithms for Systems Analysis and Optimization of the Water-Energy Nexus. *Processes*, **2015**, 3, 514-539	2.9	18
160	Process-level modelling and optimization to evaluate metal‐organic frameworks for post-combustion capture of CO_2. *Molecular Systems Design and Engineering*, **2020**, 5, 1205-1218	4.6	17
159	Dairy waste-to-energy incentive policy design using Stackelberg-game-based modeling and optimization. *Applied Energy*, **2019**, 254, 113701	10.7	17
158	A Self-Consistent Theory for the Inter- and Intramolecular Correlation Functions of a Hard-Sphere-Yukawa-Chain Fluids. *Chinese Physics Letters*, **2005**, 22, 246-249	1.8	17
157	A multi-objective optimization-extended techno-economic assessment: exploring the optimal microalgal-based value chain. *Green Chemistry*, **2019**, 21, 5945-5959	10	17
156	Repairing Automotive Dies With Directed Energy Deposition: Industrial Application and Life Cycle Analysis. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*, **2019**, 141,	3.3	17
155	Techno-Economic Feasibility and Spatial Analysis of Thermochemical Conversion Pathways for Regional Poultry Waste Valorization. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 5763-5775	8.3	16
154	On-line simulation and optimization of a commercial-scale shell entrained-flow gasifier using a novel dynamic reduced order model. *Energy*, **2018**, 149, 516-534	7.9	16
153	Dynamic Material Flow Analysis-Based Life Cycle Optimization Framework and Application to Sustainable Design of Shale Gas Energy Systems. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 11734-11752	8.3	16
152	A novel adaptive surrogate modeling-based algorithm for simultaneous optimization of sequential batch process scheduling and dynamic operations. *AICHE Journal*, **2015**, 61, 4191-4209	3.6	16
151	Optimal Design of Energy Systems Involving Pollution Trading through Forest Plantations. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 2585-2604	8.3	15
150	Core temperature modelling and monitoring of lithium-ion battery in the presence of sensor bias. *Applied Energy*, **2020**, 271, 115243	10.7	15
149	Retrofitting Municipal Wastewater Treatment Facilities toward a Greener and Circular Economy by Virtue of Resource Recovery: Techno-Economic Analysis and Life Cycle Assessment. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 13823-13837	8.3	15
148	Quantum computing based hybrid deep learning for fault diagnosis in electrical power systems. *Applied Energy*, **2021**, 303, 117628	10.7	15
147	A stochastic game theoretic framework for decentralized optimization of multi-stakeholder supply chains under uncertainty. *Computers and Chemical Engineering*, **2019**, 122, 31-46	4	13

146	Liquefied natural gas supply chain using liquid air as a cold carrier: Novel method for energy recovery. *Energy Conversion and Management*, **2021**, 227, 113611	10.6	13
145	Sustainable Residential Micro-Cogeneration System Based on a Fuel Cell Using Dynamic Programming-Based Economic Day-Ahead Scheduling. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 3258-3266	8.3	13
144	Soft-constrained model predictive control based on data-driven distributionally robust optimization. *AICHE Journal*, **2020**, 66, e16546	3.6	12
143	Multi-objective economic-resource-production optimization of sustainable organic mixed farming systems with nutrient recycling. *Journal of Cleaner Production*, **2018**, 196, 304-330	10.3	12
142	Quantum computing assisted deep learning for fault detection and diagnosis in industrial process systems. *Computers and Chemical Engineering*, **2020**, 143, 107119	4	12
141	A data-driven approach for industrial utility systems optimization under uncertainty. *Energy*, **2019**, 182, 559-569	7.9	11
140	Resource recovery and waste-to-energy from wastewater sludge via thermochemical conversion technologies in support of circular economy: a comprehensive review. *BMC Chemical Engineering*, **2020**, 2,	3.5	11
139	Second life and recycling: Energy and environmental sustainability perspectives for high-performance lithium-ion batteries. *Science Advances*, **2021**, 7, eabi7633	14.3	11
138	Multiobjective economic and environmental optimization of global crude oil purchase and sale planning with noncooperative stakeholders. *Applied Energy*, **2020**, 259, 114222	10.7	11
137	Machine Learning and Data-Driven Techniques for the Control of Smart Power Generation Systems: An Uncertainty Handling Perspective. *Engineering*, **2021**,	9.7	11
136	Energy optimization of water supply system scheduling: Novel MINLP model and efficient global optimization algorithm. *AICHE Journal*, **2016**, 62, 4277-4296	3.6	11
135	Superstructure optimization of thermal conversion based poultry litter valorization process. *Journal of Cleaner Production*, **2019**, 228, 1111-1121	10.3	10
134	Sustainable design of geothermal energy systems for electric power generation using life cycle optimization. *AICHE Journal*, **2020**, 66, e16898	3.6	10
133	Transfer learning for end-product quality prediction of batch processes using domain-adaption joint-Y PLS. *Computers and Chemical Engineering*, **2020**, 140, 106943	4	9
132	Systematic Design and Optimization of a Membrane$\Box$Cryogenic Hybrid System for CO2 Capture. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 17186-17197	8.3	9
131	Integrated multi-echelon supply chain design with inventories under uncertainty: MINLP models, computational strategies. *AICHE Journal*, **2009**, 56, NA-NA	3.6	9
130	Sustainable Manufacturing With Cyber-Physical Discrete Manufacturing Networks: Overview and Modeling Framework. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*, **2019**, 141,	3.3	8
129	Forecasting plastic waste generation and interventions for environmental hazard mitigation. *Journal of Hazardous Materials*, **2022**, 424, 127330	12.8	8

128	Optimal synthesis of integrated process for co-production of biodiesel and hydrotreated vegetable oil (HVO) diesel from hybrid oil feedstocks. *Computer Aided Chemical Engineering*, **2017**, 40, 673-678	0.6	7
127	Monetizing shale gas to polymers under mixed uncertainty: Stochastic modeling and likelihood analysis. *AICHE Journal*, **2018**, 64, 2017-2036	3.6	7
126	Systems Design, Modeling, and Thermoeconomic Analysis of Azeotropic Distillation Processes for Organic Waste Treatment and Recovery in Nylon Plants. *Industrial & Engineering Chemistry Research*, **2018**, 57, 9994-10010	3.9	7
125	Can Artificial Intelligence and Machine Learning Be Used to Accelerate Sustainable Chemistry and Engineering?. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 6126-6129	8.3	7
124	Bilayer Distributed Optimization for Robust Microgrid Dispatch With Coupled Individual-Collective Profits. *IEEE Transactions on Sustainable Energy*, **2021**, 12, 1525-1538	8.2	7
123	Waste respirator processing system for public health protection and climate change mitigation under COVID-19 pandemic: Novel process design and energy, environmental, and techno-economic perspectives. *Applied Energy*, **2021**, 283, 116129	10.7	7
122	Optimal design of water networks for shale gas hydraulic fracturing including economic and environmental criteria. *Clean Technologies and Environmental Policy*, **2018**, 20, 2311-2332	4.3	7
121	Consequential Life Cycle Assessment and Optimization of High-Density Polyethylene Plastic Waste Chemical Recycling. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 12167-12184	8.3	7
120	Process Design and Optimization of an Integrated Shale Gas Process for Green Chemicals Production. *Computer Aided Chemical Engineering*, **2015**, 1397-1402	0.6	6
119	Design of Biofuel Supply Chains under Uncertainty with Multiobjective Stochastic Programming Models and Decomposition Algorithm. *Computer Aided Chemical Engineering*, **2013**, 493-498	0.6	6
118	Optimal Design of Large-Scale Supply Chain with Multi-Echelon Inventory and Risk Pooling under Demand Uncertainty. *Computer Aided Chemical Engineering*, **2009**, 991-996	0.6	6
117	Smart greenhouse control under harsh climate conditions based on data-driven robust model predictive control with principal component analysis and kernel density estimation. *Journal of Process Control*, **2021**, 107, 103-113	3.9	6
116	Energy and environmental sustainability of waste personal protective equipment (PPE) treatment under COVID-19. *Renewable and Sustainable Energy Reviews*, **2022**, 153, 111786	16.2	6
115	Deep Learning based Distributionally Robust Joint Chance Constrained Economic Dispatch under Wind Power Uncertainty. *IEEE Transactions on Power Systems*, **2021**, 1-1	7	6
114	Semiclosed Greenhouse Climate Control Under Uncertainty via Machine Learning and Data-Driven Robust Model Predictive Control. *IEEE Transactions on Control Systems Technology*, **2021**, 1-12	4.8	6
113	Distributionally robust chance constrained programming with generative adversarial networks (GANs). *AICHE Journal*, **2020**, 66, e16963	3.6	5
112	Introducing Green GDP as an Objective to Account for Changes in Global Ecosystem Services Due to Biofuel Production. *Computer Aided Chemical Engineering*, **2017**, 40, 505-510	0.6	5
111	Density functional for structures of colloids confined in a slit-like pore. *Particuology: Science and Technology of Particles*, **2005**, 3, 265-270		5

110	Trend towards virtual and hybrid conferences may be an effective climate change mitigation strategy.. *Nature Communications*, **2021**, 12, 7324	17.4	5
109	Projection-based Reformulation and Decomposition Algorithm for A Class of Mixed-Integer Bilevel Linear Programs. *Computer Aided Chemical Engineering*, **2016**, 481-486	0.6	5
108	Data-driven robust model predictive control framework for stem water potential regulation and irrigation in water management. *Control Engineering Practice*, **2021**, 113, 104841	3.9	5
107	Next generation pure component property estimation models: With and without machine learning techniques. *AICHE Journal*,e17469	3.6	5
106	Waste high-density polyethylene recycling process systems for mitigating plastic pollution through a sustainable design and synthesis paradigm. *AICHE Journal*, **2021**, 67, e17127	3.6	5
105	A Data-Driven Robust Optimization Approach to Operational Optimization of Industrial Steam Systems under Uncertainty. *Computer Aided Chemical Engineering*, **2019**, 46, 1399-1404	0.6	4
104	Dynamic modeling, systematic analysis, and operation optimization for shell entrained-flow heavy residue gasifier. *Energy*, **2020**, 197, 117220	7.9	4
103	Noncooperative Game Theory To Ensure the Marketability of Organic Fertilizers within a Sustainable Circular Economy. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 3809-3819	8.3	4
102	A transformation-proximal bundle algorithm for multistage adaptive robust optimization and application to constrained robust optimal control. *Automatica*, **2020**, 113, 108802	5.7	4
101	Functional-unit-based life cycle optimization of sustainable biomass-to-electricity supply chain with economic and environmental tradeoffs. *Computer Aided Chemical Engineering*, **2014**, 651-656	0.6	4
100	Simulation-based optimization for multi-echelon inventory systems under uncertainty **2014**,		4
99	Multiobjective optimization of hydrocarbon biorefinery supply chain designs under uncertainty **2012**,		4
98	Machine learning for multiscale modeling in computational molecular design. *Current Opinion in Chemical Engineering*, **2022**, 36, 100752	5.4	4
97	Multi-stage economic model predictive control for a gold cyanidation leaching process under uncertainty. *AICHE Journal*, **2021**, 67,	3.6	4
96	Sustainable design of Cornell University campus energy systems toward climate neutrality and 100% renewables. *Renewable and Sustainable Energy Reviews*, **2022**, 161, 112383	16.2	4
95	Toward Carbon-Neutral Electric Power Systems in the New York State: a Novel Multi-Scale Bottom-Up Optimization Framework Coupled with Machine Learning for Capacity Planning at Hourly Resolution. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 1805-1821	8.3	4
94	Simulation-based optimization framework for economic operations of autonomous electric taxicab considering battery aging. *Applied Energy*, **2020**, 279, 115721	10.7	3
93	Shale Gas Process and Supply Chain Optimization **2017**, 21-46		3

No.	Title	IF	Cit.
92	Value-added Chemicals from Microalgae: A Sustainable Process Design Using Life Cycle Optimization. *Computer Aided Chemical Engineering*, **2015**, 37, 1403-1408	0.6	3
91	New frontiers of quantum computing in chemical engineering. *Korean Journal of Chemical Engineering*,1	2.8	3
90	Quantum computing for chemical and biomolecular product design. *Current Opinion in Chemical Engineering*, **2022**, 36, 100754	5.4	3
89	Life Cycle Energy, Environmental and Economic Comparative Analysis of CdTe Thin-film Photovoltaics Domestic and Overseas Manufacturing Scenarios. *Computer Aided Chemical Engineering*, **2013**, 32, 733-738	0.6	3
88	Online learning based risk-averse stochastic MPC of constrained linear uncertain systems. *Automatica*, **2021**, 125, 109402	5.7	3
87	Paradigm Shift: The Promise of Deep Learning in Molecular Systems Engineering and Design. *Frontiers in Chemical Engineering*, **2021**, 3,	1	3
86	Prediction of Cover Crop Adoption through Machine Learning Models using Satellite-derived Data. *IFAC-PapersOnLine*, **2019**, 52, 137-142	0.7	3
85	Robust Optimization in High-Dimensional Data Space with Support Vector Clustering. *IFAC-PapersOnLine*, **2018**, 51, 19-24	0.7	3
84	Can decontamination and reuse of N95 respirators during COVID-19 pandemic provide energy, environmental, and economic benefits?. *Applied Energy*, **2021**, 304, 117848	10.7	3
83	Quantum computing and quantum artificial intelligence for renewable and sustainable energy: A emerging prospect towards climate neutrality. *Renewable and Sustainable Energy Reviews*, **2022**, 165, 112493	16.2	3
82	Process Modeling and Analysis of Manufacturing Pathways for Producing Ethylene and Propylene from Wet Shale Gas and Naphtha. *Computer Aided Chemical Engineering*, **2017**, 361-366	0.6	2
81	An efficient global optimization algorithm for mixed-integer nonlinear fractional programs with separable concave terms **2015**,		2
80	Simulation-based method for optimizing multi-echelon inventory systems **2014**,		2
79	Optimization of water management in shale gas production process **2014**,		2
78	Integrated Scheduling and Dynamic Optimization for Network Batch Processes. *Computer Aided Chemical Engineering*, **2014**, 33, 523-528	0.6	2
77	Parametric Solution Algorithms for Large-Scale Mixed-Integer Fractional Programming Problems and Applications in Process Systems Engineering. *Computer Aided Chemical Engineering*, **2014**, 33, 259-264	0.6	2
76	MINLP Model and Algorithms for Optimal Design of Large-Scale Supply Chain with Multi-Echelon Inventory and Risk Pooling Under Demand Uncertainty. *Computer Aided Chemical Engineering*, **2009**, 27, 1983-1988	0.6	2
75	Integrated scheduling and control of a polymerization reactor with online closed-loop implementation. *Computer Aided Chemical Engineering*, **2013**, 481-486	0.6	2

74	A Leader-Follower Game-Based Life Cycle Optimization Framework and Application. *Computer Aided Chemical Engineering*, **2016**, 38, 541-546	0.6	2
73	Optimal Superstructure-Based Design and Synthesis of Hydrocarbon Biorefinery via Fast Pyrolysis, Hydrogen Production and Hydroprocessing Pathway. *Computer Aided Chemical Engineering*, **2014**, 33, 175-180	0.6	2
72	Multi-Stage Adaptive Robust Optimization over Bioconversion Product and Process Networks with Uncertain Feedstock Price and Biofuel Demand. *Computer Aided Chemical Engineering*, **2016**, 217-222	0.6	2
71	Risk Management of Shale Gas Supply Chain under Estimated Ultimate Recovery Uncertainty. *Computer Aided Chemical Engineering*, **2016**, 529-534	0.6	2
70	Robust Constrained Model Predictive Control of Irrigation Systems Based on Data-Driven Uncertainty Set Constructions **2019**,		2
69	Including Agricultural and Organic Waste in Food-Water-Energy-Waste Nexus Modelling and Decision-Making. *Computer Aided Chemical Engineering*, **2018**, 43, 1475-1480	0.6	2
68	Data-Driven Robust MPC for Controlled Environment Agriculture. *Computer Aided Chemical Engineering*, **2021**, 1181-1187	0.6	2
67	A Platform of Machine Learning-Based Next-Generation Property Estimation Methods for CAMD. *Computer Aided Chemical Engineering*, **2021**, 227-233	0.6	2
66	Optimal Design and Operational Planning of Responsive Process Supply Chains107-134		2
65	Sustainable power systems operations under renewable energy induced disjunctive uncertainties via machine learning-based robust optimization. *Renewable and Sustainable Energy Reviews*, **2022**, 161, 112428	16.2	2
64	Deep learning to catalyze inverse molecular design. *Chemical Engineering Journal*, **2022**, 444, 136669	14.7	2
63	Sustainable Design of Energy Systems by Integrating Life Cycle Optimization With Superstructure Optimization. *Computer Aided Chemical Engineering*, **2019**, 47, 211-220	0.6	1
62	Optimal Design and Synthesis of Algae Processing Network under Uncertainty Based on Return on Investment. *Computer Aided Chemical Engineering*, **2016**, 38, 2301-2306	0.6	1
61	Optimal Design and Synthesis of Shale Gas Processing and NGL Recovery Processes. *Computer Aided Chemical Engineering*, **2016**, 38, 535-540	0.6	1
60	Resilient Design and Operations of Chemical Process Systems. *Computer Aided Chemical Engineering*, **2018**, 1-6	0.6	1
59	A Game Theory Approach to Design and Optimization of Decentralized Supply Chains under Uncertainty. *Computer Aided Chemical Engineering*, **2018**, 44, 1603-1608	0.6	1
58	Distributionally Robust Process Scheduling under Ambiguous Uncertainty **2018**,		1
57	Comparative Life Cycle Assessment of Ethylene from Wet Shale Gas and Biomass. *Computer Aided Chemical Engineering*, **2018**, 43, 37-42	0.6	1

56	Energy integration and optimisation for sustainable total site, process and equipment design. *Energy*, **2019**, 186, 115896	7.9	1
55	Consequential Life Cycle Analysis for Food-Water- Energy-Waste Nexus. *Computer Aided Chemical Engineering*, **2019**, 1705-1710	0.6	1
54	Parametric algorithms for global optimization of mixed-integer fractional programming problems in process engineering **2014**,		1
53	Sustainable Design and Synthesis of Algal Biorefinery for Biofuel Production. *Computer Aided Chemical Engineering*, **2014**, 1429-1434	0.6	1
52	Leveraging big data for adaptive robust optimization of scheduling under uncertainty **2017**,		1
51	When Robust Statistics Meets with Robust Optimization: Data-Driven Batch Process Scheduling in The Presence of Outliers. *Computer Aided Chemical Engineering*, **2017**, 40, 2263-2268	0.6	1
50	Stochastic programming approach to optimal design and operations of shale gas supply chain under uncertainty **2015**,		1
49	Functional-unit-based Life Cycle Optimization for Design of Sustainable Product Systems with Application on Biofuel Supply Chains. *Computer Aided Chemical Engineering*, **2014**, 33, 1063-1068	0.6	1
48	Making transportation fuels and electricity from non-petroleum-based hybrid processes: process design and optimization. *Computer Aided Chemical Engineering*, **2014**, 34, 537-542	0.6	1
47	Integrated planning and scheduling by hybrid solution method **2014**,		1
46	Hybrid agent-based method for scheduling of complex batch processes **2014**,		1
45	Reformulation-linearization Method for Global Optimization of Mixed Integer Linear Fractional Programming Problems with Application on Sustainable Batch Scheduling. *Computer Aided Chemical Engineering*, **2014**, 949-954	0.6	1
44	Hedging Against Uncertainty in Process Planning: A Data-Driven Adaptive Nested Robust Optimization Approach. *Computer Aided Chemical Engineering*, **2017**, 40, 1345-1350	0.6	1
43	Hedging Against Uncertain Feedstock Compositions in Shale Gas Processing System Designs with Intensified Equipment Capacities. *Computer Aided Chemical Engineering*, **2017**, 40, 1051-1056	0.6	1
42	Energy and Environmental Sustainability Assessment of Photovoltaics Transition toward Perovskite2Perovskite Tandems from the Attributional and Consequential Perspectives. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 11247-11257	8.3	1
41	Chemical Process Scheduling under Disjunctive Uncertainty Using Data-Driven Multistage Adaptive Robust Optimization **2019**,		1
40	Deciphering Latent Uncertainty Sources with Principal Component Analysis for Adaptive Robust Optimization. *Computer Aided Chemical Engineering*, **2019**, 46, 1189-1194	0.6	1
39	Data-Driven Adaptive Robust Optimization Framework for Unit Commitment under Renewable Energy Generation Uncertainty **2019**,		1

38	A Posteriori Probabilistic Bounds of Convex Scenario Programs With Validation Tests. *IEEE Transactions on Automatic Control*, **2021**, 66, 4015-4028	5.9	1
37	Sustainable Process Design and Synthesis for HDPE Recycling. *Computer Aided Chemical Engineering* , **2021**, 31-36	0.6	1
36	A Transformation-Proximal Bundle Algorithm for Solving Multistage Adaptive Robust Optimization Problems **2018**,		1
35	Data-Driven Process Network Planning: A Distributionally Robust Optimization Approach. *IFAC-PapersOnLine*, **2018**, 51, 150-155	0.7	1
34	Endpoint-oriented Life Cycle Optimization Models for Sustainable Design and Operations of Shale Gas Supply Chains with Modular Manufacturing. *Computer Aided Chemical Engineering*, **2018**, 43, 591-596	0.6	1
33	Nonlinear soft sensor development for industrial thickeners using domain transfer functional-link neural network. *Control Engineering Practice*, **2021**, 113, 104853	3.9	1
32	Perspectives of quantum computing for chemical engineering. *AICHE Journal*,	3.6	1
31	Plastic Circular Economy Framework using Hybrid Machine Learning and Pinch Analysis. *Resources, Conservation and Recycling*, **2022**, 184, 106387	11.9	1
30	Product and Process Network Modeling and Pathway Optimization with Life Cycle Functional Unit Analysis: The Case of Biofuels. *Computer Aided Chemical Engineering*, **2015**, 2069-2074	0.6	0
29	Fault Diagnosis of Electrical Power Systems with Hybrid Quantum-Classical Deep Learning. *Computer Aided Chemical Engineering*, **2021**, 50, 1173-1179	0.6	0
28	A Hybrid Solution Approach for Large-scale Batch Scheduling with Quantum Computing. *Computer Aided Chemical Engineering*, **2021**, 50, 1747-1753	0.6	0
27	Synthesis and Design of Sustainable Integrated Process, Water Treatment, Energy Supply Networks and Carbon Utilization Networks Under Uncertainty. *Computer Aided Chemical Engineering*, **2021**, 1497-1503	0.6	0
26	Efficient scheduling method of complex batch processes with general network structure via agent-based modeling **2013**, 59, 2884		0
25	COVID-19 impact on an academic Institution's greenhouse gas inventory: The case of Cornell University. *Journal of Cleaner Production*, **2022**, 363, 132440	10.3	0
24	Intelligent control and energy optimization in controlled environment agriculture via nonlinear model predictive control of semi-closed greenhouse. *Applied Energy*, **2022**, 320, 119334	10.7	0
23	Mixed-Integer Fractional Programming: Models, Algorithms, and Applications in Process Operations, Energy Systems, and Sustainability. *Computer Aided Chemical Engineering*, **2015**, 37, 109-116	0.6	
22	Optimization of Pressure/Vacuum Swing Adsorption with Variable Dehydration Levels for Post Combustion Carbon Capture. *Computer Aided Chemical Engineering*, **2015**, 37, 2447-2452	0.6	
21	Life Cycle Optimisation from A Noncooperative Perspective: Game Theory-Based Models and Applications. *Computer Aided Chemical Engineering*, **2017**, 40, 1915-1920	0.6	

20 Optimal Global Land Use, Cultivation, Transportation, and Production Strategies to Minimise Life Cycle Greenhouse Gas Emissions of Ethanol. *Computer Aided Chemical Engineering*, **2017**, 40, 2005-2010 0.6

19 Optimal design and operation of water supply chain networks using scenario-based dynamic negotiation and multiple negotiation terms. *Computer Aided Chemical Engineering*, **2017**, 40, 1921-1926 0.6

18 Synthesis of Resource Optimal Chemical Processes **2018**, 347-371

17 Leveraging the Power of Big Data Analytics for Process Scheduling under Uncertainty using a Stochastic Robust Optimization Approach. *Computer Aided Chemical Engineering*, **2018**, 319-324 0.6

16 Data-Based Robust Model Predictive Control Under Conditional Uncertainty. *Computer Aided Chemical Engineering*, **2019**, 1375-1380 0.6

15 Computational evaluation of factors governing catalytic 2-keto acid decarboxylation. *Journal of Molecular Modeling*, **2014**, 20, 2310 2

14 Optimal Design and Operational Planning of Responsive Process Supply Chains **2014**, 107-134

13 MINLP model and algorithm for superstructure optimization of algae processing network. *Computer Aided Chemical Engineering*, **2014**, 34, 531-536 0.6

12 Consequential life cycle assessment: Evaluating the environmental impact of dairy manure treatment using thermochemical conversion technologies **2022**, 607-637

11 Optimizing Return on Investment in Biomass Conversion Networks under Uncertainty Using Data-Driven Adaptive Robust Optimization. *Computer Aided Chemical Engineering*, **2019**, 46, 67-72 0.6

10 Adjustable Robust Optimization for Scheduling of Batch Processes under Uncertainty. *Computer Aided Chemical Engineering*, **2016**, 547-552 0.6

9 Investigating the energy-water-carbon nexus of mega-scale chemicals production from Appalachian shale gas. *Computer Aided Chemical Engineering*, **2016**, 38, 865-870 0.6

8 Integrated Hybrid Life Cycle Optimization with Application to Sustainable Design of A UK Advanced Biofuel Supply Chain. *Computer Aided Chemical Engineering*, **2016**, 38, 2295-2300 0.6

7 Addressing the Minimum Environmental Impacts of Algal Renewable Diesel Production from a Consequential Perspective. *Computer Aided Chemical Engineering*, **2017**, 2605-2610 0.6

6 Life Cycle Algal Biorefinery Design **2016**, 363-381

5 Design of Food-Energy-Water-Waste Nexus Systems in New York State under COVID-19 Pandemic. *Computer Aided Chemical Engineering*, **2021**, 50, 1465-1471 0.6

4 A Novel Process Design for Waste Respirator Processing. *Computer Aided Chemical Engineering*, **2021**, 37-42 0.6

3 Life Cycle Optimization of Hybrid Energy Systems towards Carbon Neutrality. *Computer Aided Chemical Engineering*, **2021**, 1445-1451 0.6

LIST OF PUBLICATIONS

| 2 | Robust Process Scheduling under Uncertainty with Regret. *Computer Aided Chemical Engineering*, **2018**, 913-918 | 0.6 |
| 1 | Process Scheduling under Ambiguity Uncertainty Probability Distribution. *Computer Aided Chemical Engineering*, **2018**, 43, 919-924 | 0.6 |