# Fengqi You

## List of Publications by Year in Descending Order

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|---|---|---|---|
| 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 | Consequential life cycle assessment: Evaluating the environmental impact of dairy manure treatment using thermochemical conversion technologies **2022**, 607-637 | | |
| 306 | 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 |
| 305 | Machine learning for multiscale modeling in computational molecular design. *Current Opinion in Chemical Engineering*, **2022**, 36, 100752 | 5.4 | 4 |
| 304 | Quantum computing for chemical and biomolecular product design. *Current Opinion in Chemical Engineering*, **2022**, 36, 100754 | 5.4 | 3 |
| 303 | Forecasting plastic waste generation and interventions for environmental hazard mitigation. *Journal of Hazardous Materials*, **2022**, 424, 127330 | 12.8 | 8 |
| 302 | 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 |
| 301 | 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 |
| 300 | 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 |
| 299 | Deep learning to catalyze inverse molecular design. *Chemical Engineering Journal*, **2022**, 444, 136669 | 14.7 | 2 |
| 298 | Plastic Circular Economy Framework using Hybrid Machine Learning and Pinch Analysis. *Resources, Conservation and Recycling*, **2022**, 184, 106387 | 11.9 | 1 |
| 297 | 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 |
| 296 | 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 |
| 295 | 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 |
| 294 | Trend towards virtual and hybrid conferences may be an effective climate change mitigation strategy.. *Nature Communications*, **2021**, 12, 7324 | 17.4 | 5 |
| 293 | Second life and recycling: Energy and environmental sustainability perspectives for high-performance lithium-ion batteries. *Science Advances*, **2021**, 7, eabi7633 | 14.3 | 11 |
| 292 | 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 |
| 291 | Online learning based risk-averse stochastic MPC of constrained linear uncertain systems. *Automatica*, **2021**, 125, 109402 | 5.7 | 3 |

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| 290 | Process systems engineering The generation next?. *Computers and Chemical Engineering*, **2021**, 147, 107252 | 4 | 38 |
| 289 | 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 |
| 288 | New York States 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 |
| 287 | Life cycle assessment of recycling strategies for perovskite photovoltaic modules. *Nature Sustainability*, **2021**, 4, 821-829 | 22.1 | 28 |
| 286 | Paradigm Shift: The Promise of Deep Learning in Molecular Systems Engineering and Design. *Frontiers in Chemical Engineering*, **2021**, 3, | 1 | 3 |
| 285 | Bilayer Distributed Optimization for Robust Microgrid Dispatch With Coupled Individual-Collective Profits. *IEEE Transactions on Sustainable Energy*, **2021**, 12, 1525-1538 | 8.2 | 7 |
| 284 | Energy and Environmental Sustainability Assessment of Photovoltaics Transition toward PerovskitePerovskite Tandems from the Attributional and Consequential Perspectives. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 11247-11257 | 8.3 | 1 |
| 283 | Machine Learning and Data-Driven Techniques for the Control of Smart Power Generation Systems: An Uncertainty Handling Perspective. *Engineering*, **2021**, | 9.7 | 11 |
| 282 | 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 |
| 281 | 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 |
| 280 | 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 |
| 279 | A Posteriori Probabilistic Bounds of Convex Scenario Programs With Validation Tests. *IEEE Transactions on Automatic Control*, **2021**, 66, 4015-4028 | 5.9 | 1 |
| 278 | Multi-stage economic model predictive control for a gold cyanidation leaching process under uncertainty. *AICHE Journal*, **2021**, 67, | 3.6 | 4 |
| 277 | Fault Diagnosis of Electrical Power Systems with Hybrid Quantum-Classical Deep Learning. *Computer Aided Chemical Engineering*, **2021**, 50, 1173-1179 | 0.6 | 0 |
| 276 | Sustainable Process Design and Synthesis for HDPE Recycling. *Computer Aided Chemical Engineering* , **2021**, 31-36 | 0.6 | 1 |
| 275 | 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 | |
| 274 | A Novel Process Design for Waste Respirator Processing. *Computer Aided Chemical Engineering*, **2021**, 37-42 | 0.6 | |
| 273 | Deep Learning based Distributionally Robust Joint Chance Constrained Economic Dispatch under Wind Power Uncertainty. *IEEE Transactions on Power Systems*, **2021**, 1-1 | 7 | 6 |

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| 272 | 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 |
| 271 | A Hybrid Solution Approach for Large-scale Batch Scheduling with Quantum Computing. *Computer Aided Chemical Engineering*, **2021**, 50, 1747-1753 | 0.6 0 |
| 270 | Life Cycle Optimization of Hybrid Energy Systems towards Carbon Neutrality. *Computer Aided Chemical Engineering*, **2021**, 1445-1451 | 0.6 |
| 269 | 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 |
| 268 | 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 |
| 267 | 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 |
| 266 | Nonlinear soft sensor development for industrial thickeners using domain transfer functional-link neural network. *Control Engineering Practice*, **2021**, 113, 104853 | 3.9 1 |
| 265 | 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 |
| 264 | Quantum computing based hybrid deep learning for fault diagnosis in electrical power systems. *Applied Energy*, **2021**, 303, 117628 | 10.7 15 |
| 263 | 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 |
| 262 | Data-Driven Robust MPC for Controlled Environment Agriculture. *Computer Aided Chemical Engineering*, **2021**, 1181-1187 | 0.6 2 |
| 261 | 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 |
| 260 | A Platform of Machine Learning-Based Next-Generation Property Estimation Methods for CAMD. *Computer Aided Chemical Engineering*, **2021**, 227-233 | 0.6 2 |
| 259 | Simulation-based optimization framework for economic operations of autonomous electric taxicab considering battery aging. *Applied Energy*, **2020**, 279, 115721 | 10.7 3 |
| 258 | Core temperature modelling and monitoring of lithium-ion battery in the presence of sensor bias. *Applied Energy*, **2020**, 271, 115243 | 10.7 15 |
| 257 | 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 |
| 256 | Distributionally robust chance constrained programming with generative adversarial networks (GANs). *AICHE Journal*, **2020**, 66, e16963 | 3.6 5 |
| 255 | 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 |

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| 254 | Dynamic modeling, systematic analysis, and operation optimization for shell entrained-flow heavy residue gasifier. *Energy*, **2020**, 197, 117220 | 7.9 | 4 |
| 253 | 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 |
| 252 | 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 |
| 251 | Process-level modelling and optimization to evaluate metalrganic frameworks for post-combustion capture of CO2. *Molecular Systems Design and Engineering*, **2020**, 5, 1205-1218 | 4.6 | 17 |
| 250 | Deep learning and knowledge-based methods for computer-aided molecular design oward a unified approach: State-of-the-art and future directions. *Computers and Chemical Engineering*, **2020**, 141, 107005 | 4 | 35 |
| 249 | Soft-constrained model predictive control based on data-driven distributionally robust optimization. *AICHE Journal*, **2020**, 66, e16546 | 3.6 | 12 |
| 248 | 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 |
| 247 | 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 |
| 246 | Novel massive thermal energy storage system for liquefied natural gas cold energy recovery. *Energy*, **2020**, 195, 117022 | 7.9 | 21 |
| 245 | A transformation-proximal bundle algorithm for multistage adaptive robust optimization and application to constrained robust optimal control. *Automatica*, **2020**, 113, 108802 | 5.7 | 4 |
| 244 | Decentralized-distributed robust electric power scheduling for multi-microgrid systems. *Applied Energy*, **2020**, 269, 115146 | 10.7 | 30 |
| 243 | Quantum computing based hybrid solution strategies for large-scale discrete-continuous optimization problems. *Computers and Chemical Engineering*, **2020**, 132, 106630 | 4 | 42 |
| 242 | Active disturbance rejection temperature control of open-cathode proton exchange membrane fuel cell. *Applied Energy*, **2020**, 261, 114381 | 10.7 | 68 |
| 241 | Multiobjective economic and environmental optimization of global crude oil purchase and sale planning with noncooperative stakeholders. *Applied Energy*, **2020**, 259, 114222 | 10.7 | 11 |
| 240 | Sustainable design of geothermal energy systems for electric power generation using life cycle optimization. *AICHE Journal*, **2020**, 66, e16898 | 3.6 | 10 |
| 239 | 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 |
| 238 | Quantum computing assisted deep learning for fault detection and diagnosis in industrial process systems. *Computers and Chemical Engineering*, **2020**, 143, 107119 | 4 | 12 |
| 237 | Can renewable generation, energy storage and energy efficient technologies enable carbon neutral energy transition?. *Applied Energy*, **2020**, 279, 115889 | 10.7 | 56 |

| 236 | 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 |
| 235 | Life cycle energy use and environmental implications of high-performance perovskite tandem solar cells. *Science Advances*, **2020**, 6, eabb0055 | 14.3 | 25 |
| 234 | 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 |
| 233 | 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 |
| 232 | Sustainable Design of Energy Systems by Integrating Life Cycle Optimization With Superstructure Optimization. *Computer Aided Chemical Engineering*, **2019**, 47, 211-220 | 0.6 | 1 |
| 231 | 110th Anniversary: Surrogate Models Based on Artificial Neural Networks To Simulate and Optimize Pressure Swing Adsorption Cycles for $CO_2$ Capture. *Industrial &amp; Engineering Chemistry Research*, **2019**, 58, 18241-18252 | 3.9 | 32 |
| 230 | 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 |
| 229 | 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 |
| 228 | Development of a General Evaluation Metric for Rapid Screening of Adsorbent Materials for Postcombustion $CO_2$ Capture. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 11529-11539 | 8.3 | 48 |
| 227 | A data-driven approach for industrial utility systems optimization under uncertainty. *Energy*, **2019**, 182, 559-569 | 7.9 | 11 |
| 226 | 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 |
| 225 | 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 |
| 224 | Quantum computing for energy systems optimization: Challenges and opportunities. *Energy*, **2019**, 179, 76-89 | 7.9 | 43 |
| 223 | 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 |
| 222 | Superstructure optimization of thermal conversion based poultry litter valorization process. *Journal of Cleaner Production*, **2019**, 228, 1111-1121 | 10.3 | 10 |
| 221 | 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 |
| 220 | Economic Process Selection of Liquefied Natural Gas Regasification: Power Generation and Energy Storage Applications. *Industrial &amp; Engineering Chemistry Research*, **2019**, 58, 4946-4956 | 3.9 | 21 |
| 219 | 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 |

| 218 | Systems design and analysis of liquid air energy storage from liquefied natural gas cold energy. *Applied Energy*, **2019**, 242, 168-180 | 10.7 | 51 |
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| 217 | 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 |
| 216 | 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 |
| 215 | 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 |
| 214 | Energy integration and optimisation for sustainable total site, process and equipment design. *Energy*, **2019**, 186, 115896 | 7.9 | 1 |
| 213 | 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 |
| 212 | Dairy waste-to-energy incentive policy design using Stackelberg-game-based modeling and optimization. *Applied Energy*, **2019**, 254, 113701 | 10.7 | 17 |
| 211 | Systematic Design and Optimization of a Membrane Cryogenic Hybrid System for CO2 Capture. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 17186-17197 | 8.3 | 9 |
| 210 | 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 |
| 209 | Data-Based Robust Model Predictive Control Under Conditional Uncertainty. *Computer Aided Chemical Engineering*, **2019**, 1375-1380 | 0.6 | |
| 208 | Consequential Life Cycle Analysis for Food-Water- Energy-Waste Nexus. *Computer Aided Chemical Engineering*, **2019**, 1705-1710 | 0.6 | 1 |
| 207 | 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 | |
| 206 | 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 |
| 205 | Chemical Process Scheduling under Disjunctive Uncertainty Using Data-Driven Multistage Adaptive Robust Optimization **2019**, | | 1 |
| 204 | Prediction of Cover Crop Adoption through Machine Learning Models using Satellite-derived Data. *IFAC-PapersOnLine*, **2019**, 52, 137-142 | 0.7 | 3 |
| 203 | Deciphering Latent Uncertainty Sources with Principal Component Analysis for Adaptive Robust Optimization. *Computer Aided Chemical Engineering*, **2019**, 46, 1189-1194 | 0.6 | 1 |
| 202 | Data-Driven Adaptive Robust Optimization Framework for Unit Commitment under Renewable Energy Generation Uncertainty **2019**, | | 1 |
| 201 | A multi-objective optimization-extended techno-economic assessment: exploring the optimal microalgal-based value chain. *Green Chemistry*, **2019**, 21, 5945-5959 | 10 | 17 |

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| 200 | 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 |
| 199 | Robust Constrained Model Predictive Control of Irrigation Systems Based on Data-Driven Uncertainty Set Constructions **2019**, | | 2 |
| 198 | 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 |
| 197 | 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 |
| 196 | Operational optimization of industrial steam systems under uncertainty using data-Driven adaptive robust optimization. *AICHE Journal*, **2019**, 65, e16500 | 3.6 | 19 |
| 195 | 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 |
| 194 | A data-driven robust optimization approach to scenario-based stochastic model predictive control. *Journal of Process Control*, **2019**, 75, 24-39 | 3.9 | 42 |
| 193 | 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 |
| 192 | Data-driven distributionally robust optimization of shale gas supply chains under uncertainty. *AICHE Journal*, **2019**, 65, 947-963 | 3.6 | 25 |
| 191 | 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 |
| 190 | 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 |
| 189 | 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 |
| 188 | Synthesis of Resource Optimal Chemical Processes **2018**, 347-371 | | |
| 187 | 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 |
| 186 | Integrated Hybrid Life Cycle Assessment and Optimization of Shale Gas. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 1803-1824 | 8.3 | 28 |
| 185 | Distributionally robust optimization for planning and scheduling under uncertainty. *Computers and Chemical Engineering*, **2018**, 110, 53-68 | 4 | 60 |
| 184 | Manufacturing Ethylene from Wet Shale Gas and Biomass: Comparative Technoeconomic Analysis and Environmental Life Cycle Assessment. *Industrial &amp; Engineering Chemistry Research*, **2018**, 57, 5980-5998 | 3.9 | 33 |
| 183 | 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 |

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| 182 | Monetizing shale gas to polymers under mixed uncertainty: Stochastic modeling and likelihood analysis. *AICHE Journal*, **2018**, 64, 2017-2036 | 3.6 | 7 |
| 181 | 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 |
| 180 | Systems Design, Modeling, and Thermoeconomic Analysis of Azeotropic Distillation Processes for Organic Waste Treatment and Recovery in Nylon Plants. *Industrial &amp; Engineering Chemistry Research*, **2018**, 57, 9994-10010 | 3.9 | 7 |
| 179 | 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 |
| 178 | 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 |
| 177 | Resilient Design and Operations of Chemical Process Systems. *Computer Aided Chemical Engineering*, **2018**, 1-6 | 0.6 | 1 |
| 176 | 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 |
| 175 | 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 | |
| 174 | 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 |
| 173 | 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 |
| 172 | Distributionally Robust Process Scheduling under Ambiguous Uncertainty **2018**, | | 1 |
| 171 | Comparative Life Cycle Assessment of Ethylene from Wet Shale Gas and Biomass. *Computer Aided Chemical Engineering*, **2018**, 43, 37-42 | 0.6 | 1 |
| 170 | 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 |
| 169 | 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 |
| 168 | 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 |
| 167 | Robust Process Scheduling under Uncertainty with Regret. *Computer Aided Chemical Engineering*, **2018**, 913-918 | 0.6 | |
| 166 | Process Scheduling under Ambiguity Uncertainty Probability Distribution. *Computer Aided Chemical Engineering*, **2018**, 43, 919-924 | 0.6 | |
| 165 | A Transformation-Proximal Bundle Algorithm for Solving Multistage Adaptive Robust Optimization Problems **2018**, | | 1 |

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| 164 | Robust Optimization in High-Dimensional Data Space with Support Vector Clustering. *IFAC-PapersOnLine*, **2018**, 51, 19-24 | 0.7 | 3 |
| 163 | Data-Driven Process Network Planning: A Distributionally Robust Optimization Approach. *IFAC-PapersOnLine*, **2018**, 51, 150-155 | 0.7 | 1 |
| 162 | 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 |
| 161 | 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 |
| 160 | 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 |
| 159 | Global carbon intensity of crude oil production. *Science*, **2018**, 361, 851-853 | 33.3 | 100 |
| 158 | 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 |
| 157 | Design and optimization of shale gas energy systems: Overview, research challenges, and future directions. *Computers and Chemical Engineering*, **2017**, 106, 699-718 | 4 | 69 |
| 156 | Optimal Design of Energy Systems Involving Pollution Trading through Forest Plantations. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 2585-2604 | 8.3 | 15 |
| 155 | A data-driven multistage adaptive robust optimization framework for planning and scheduling under uncertainty. *AICHE Journal*, **2017**, 63, 4343-4369 | 3.6 | 69 |
| 154 | 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 |
| 153 | Comparative Techno-Economic and Environmental Analysis of Ethylene and Propylene Manufacturing from Wet Shale Gas and Naphtha. *Industrial &amp; Engineering Chemistry Research*, **2017**, 56, 4038-4051 | 3.9 | 68 |
| 152 | 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 |
| 151 | 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 |
| 150 | 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 |
| 149 | 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 |
| 148 | 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 |
| 147 | Life Cycle Optimisation from A Noncooperative Perspective: Game Theory-Based Models and Applications. *Computer Aided Chemical Engineering*, **2017**, 40, 1915-1920 | 0.6 | |

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| 146 | 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 | |
| 145 | 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 |
| 144 | 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 | |
| 143 | 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 |
| 142 | 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 |
| 141 | Data-driven robust optimization based on kernel learning. *Computers and Chemical Engineering*, **2017**, 106, 464-479 | 4 | 76 |
| 140 | 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 |
| 139 | Leveraging big data for adaptive robust optimization of scheduling under uncertainty **2017**, | | 1 |
| 138 | Computational Screening of Nanoporous Materials for Hexane and Heptane Isomer Separation. *Chemistry of Materials*, **2017**, 29, 6315-6328 | 9.6 | 46 |
| 137 | Shale Gas Process and Supply Chain Optimization **2017**, 21-46 | | 3 |
| 136 | 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 |
| 135 | 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 |
| 134 | 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 |
| 133 | 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 |
| 132 | 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 |
| 131 | Addressing the Minimum Environmental Impacts of Algal Renewable Diesel Production from a Consequential Perspective. *Computer Aided Chemical Engineering*, **2017**, 2605-2610 | 0.6 | |
| 130 | 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 |
| 129 | Optimal Design and Synthesis of Shale Gas Processing and NGL Recovery Processes. *Computer Aided Chemical Engineering*, **2016**, 38, 535-540 | 0.6 | 1 |

| | | | |
|---|---|---|---|
| 128 | In silico discovery of metal-organic frameworks for precombustion CO capture using a genetic algorithm. *Science Advances*, **2016**, 2, e1600909 | 14.3 | 164 |
| 127 | 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 |
| 126 | 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 |
| 125 | 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 |
| 124 | Integrating Hybrid Life Cycle Assessment with Multiobjective Optimization: A Modeling Framework. *Environmental Science &amp; Technology*, **2016**, 50, 1501-9 | 10.3 | 68 |
| 123 | Optimization of Two-Stage Pressure/Vacuum Swing Adsorption with Variable Dehydration Level for Postcombustion Carbon Capture. *Industrial &amp; Engineering Chemistry Research*, **2016**, 55, 3338-3330 | 2.9 | 55 |
| 122 | The water-energy-food nexus and process systems engineering: A new focus. *Computers and Chemical Engineering*, **2016**, 91, 49-67 | 4 | 174 |
| 121 | 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 |
| 120 | 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 |
| 119 | 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 |
| 118 | A Leader-Follower Game-Based Life Cycle Optimization Framework and Application. *Computer Aided Chemical Engineering*, **2016**, 38, 541-546 | 0.6 | 2 |
| 117 | Adjustable Robust Optimization for Scheduling of Batch Processes under Uncertainty. *Computer Aided Chemical Engineering*, **2016**, 547-552 | 0.6 | |
| 116 | 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 | |
| 115 | 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 | |
| 114 | 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 |
| 113 | Risk Management of Shale Gas Supply Chain under Estimated Ultimate Recovery Uncertainty. *Computer Aided Chemical Engineering*, **2016**, 529-534 | 0.6 | 2 |
| 112 | Energy optimization of water supply system scheduling: Novel MINLP model and efficient global optimization algorithm. *AICHE Journal*, **2016**, 62, 4277-4296 | 3.6 | 11 |
| 111 | Life Cycle Algal Biorefinery Design **2016**, 363-381 | | |

| | | | |
|---|---|---|---|
| 110 | 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 |
| 109 | Process Design and Optimization of an Integrated Shale Gas Process for Green Chemicals Production. *Computer Aided Chemical Engineering*, **2015**, 1397-1402 | 0.6 | 6 |
| 108 | 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 |
| 107 | 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 | |
| 106 | Model-based integration of control and operations: Overview, challenges, advances, and opportunities. *Computers and Chemical Engineering*, **2015**, 83, 2-20 | 4 | 66 |
| 105 | Perovskite photovoltaics: life-cycle assessment of energy and environmental impacts. *Energy and Environmental Science*, **2015**, 8, 1953-1968 | 35.4 | 355 |
| 104 | Supply chain design and optimization: Challenges and opportunities. *Computers and Chemical Engineering*, **2015**, 81, 153-170 | 4 | 177 |
| 103 | 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 |
| 102 | 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 | |
| 101 | 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 |
| 100 | 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 |
| 99 | Sustainable design and synthesis of energy systems. *Current Opinion in Chemical Engineering*, **2015**, 10, 77-86 | 5.4 | 91 |
| 98 | Value-Added Chemicals from Microalgae: Greener, More Economical, or Both?. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 82-96 | 8.3 | 88 |
| 97 | 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 |
| 96 | 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 |
| 95 | Simulation-based optimization framework for multi-echelon inventory systems under uncertainty. *Computers and Chemical Engineering*, **2015**, 73, 1-16 | 4 | 43 |
| 94 | 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 |
| 93 | 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 |

| 92 | 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 |

| 91 | Value-added Chemicals from Microalgae: A Sustainable Process Design Using Life Cycle Optimization. *Computer Aided Chemical Engineering*, **2015**, 37, 1403-1408 | 0.6 | 3 |

| 90 | 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 |

| 89 | Stochastic programming approach to optimal design and operations of shale gas supply chain under uncertainty **2015**, | | 1 |

| 88 | An efficient global optimization algorithm for mixed-integer nonlinear fractional programs with separable concave terms **2015**, | | 2 |

| 87 | 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 |

| 86 | Novel Optimization Model and Efficient Solution Method for Integrating Dynamic Optimization with Process Operations of Continuous Manufacturing Processes. *Industrial &amp; Engineering Chemistry Research*, **2015**, 54, 2167-2187 | 3.9 | 22 |

| 85 | Biomass-to-bioenergy and biofuel supply chain optimization: Overview, key issues and challenges. *Computers and Chemical Engineering*, **2014**, 66, 36-56 | 4 | 485 |

| 84 | Sustainable process design and synthesis of hydrocarbon biorefinery through fast pyrolysis and hydroprocessing. *AICHE Journal*, **2014**, 60, 980-994 | 3.6 | 38 |

| 83 | Moving horizon approach of integrating scheduling and control for sequential batch processes. *AICHE Journal*, **2014**, 60, 1654-1671 | 3.6 | 35 |

| 82 | 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 |

| 81 | 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 |

| 80 | Integrated Scheduling and Dynamic Optimization by Stackelberg Game: Bilevel Model Formulation and Efficient Solution Algorithm. *Industrial &amp; Engineering Chemistry Research*, **2014**, 53, 5564-5581 | 3.9 | 34 |

| 79 | 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 &amp; Engineering Chemistry Research*, **2014**, 53, 1563-1579 | 3.9 | 94 |

| 78 | Parametric algorithms for global optimization of mixed-integer fractional programming problems in process engineering **2014**, | | 1 |

| 77 | Biorefinery Supply Chain Network Design under Competitive Feedstock Markets: An Agent-Based Simulation and Optimization Approach. *Industrial &amp; Engineering Chemistry Research*, **2014**, 53, 15111-15126 | 3.9 | 29 |

| 76 | Sustainable Design and Operation of Cellulosic Bioelectricity Supply Chain Networks with Life Cycle Economic, Environmental, and Social Optimization. *Industrial &amp; Engineering Chemistry Research*, **2014**, 53, 4008-4029 | 3.9 | 96 |

| 75 | 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 |

| | | | |
|---|---|---|---|
| 74 | Integrated Planning, Scheduling, and Dynamic Optimization for Batch Processes: MINLP Model Formulation and Efficient Solution Methods via Surrogate Modeling. *Industrial &amp; Engineering Chemistry Research*, **2014**, 53, 13391-13411 | 3.9 | 34 |
| 73 | Sustainable Design and Synthesis of Algal Biorefinery for Biofuel Production. *Computer Aided Chemical Engineering*, **2014**, 1429-1434 | 0.6 | 1 |
| 72 | Computational evaluation of factors governing catalytic 2-keto acid decarboxylation. *Journal of Molecular Modeling*, **2014**, 20, 2310 | 2 | |
| 71 | 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 |
| 70 | Shale Gas Processing Integrated with Ethylene Production: Novel Process Designs, Exergy Analysis, and Techno-Economic Analysis. *Industrial &amp; Engineering Chemistry Research*, **2014**, 53, 11442-11459 | 3.9 | 111 |
| 69 | 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 |
| 68 | 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 |
| 67 | Optimal Design and Operational Planning of Responsive Process Supply Chains **2014**, 107-134 | | |
| 66 | 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 |
| 65 | 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 |
| 64 | 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 |
| 63 | MINLP model and algorithm for superstructure optimization of algae processing network. *Computer Aided Chemical Engineering*, **2014**, 34, 531-536 | 0.6 | |
| 62 | Simulation-based optimization for multi-echelon inventory systems under uncertainty **2014**, | | 4 |
| 61 | Simulation-based method for optimizing multi-echelon inventory systems **2014**, | | 2 |
| 60 | Integrated planning and scheduling by hybrid solution method **2014**, | | 1 |
| 59 | Optimization of water management in shale gas production process **2014**, | | 2 |
| 58 | Integrated Scheduling and Dynamic Optimization for Network Batch Processes. *Computer Aided Chemical Engineering*, **2014**, 33, 523-528 | 0.6 | 2 |
| 57 | 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 |

| 56 | Hybrid agent-based method for scheduling of complex batch processes **2014**, | | 1 |
|---|---|---|---|
| 55 | 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 |
| 54 | 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 |
| 53 | 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 |
| 52 | 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 |
| 51 | 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 |
| 50 | 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 |
| 49 | The case for organic photovoltaics. *RSC Advances*, **2013**, 3, 17633 | 3.7 | 442 |
| 48 | 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 |
| 47 | 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 |
| 46 | Multicut Benders decomposition algorithm for process supply chain planning under uncertainty. *Annals of Operations Research*, **2013**, 210, 191-211 | 3.2 | 66 |
| 45 | 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 |
| 44 | 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 |
| 43 | 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 |
| 42 | 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 |
| 41 | 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 |
| 40 | Efficient scheduling method of complex batch processes with general network structure via agent-based modeling. *AICHE Journal*, **2013**, 59, 2884-2906 | 3.6 | 40 |
| 39 | Integrated Scheduling and Dynamic Optimization of Complex Batch Processes with General Network Structure Using a Generalized Benders Decomposition Approach. *Industrial &amp; Engineering Chemistry Research*, **2013**, 52, 7867-7885 | 3.9 | 38 |

| # | | | |
|---|---|---|---|
| 38 | 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 |
| 37 | 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 |
| 36 | Integration of Scheduling and Dynamic Optimization of Batch Processes under Uncertainty: Two-Stage Stochastic Programming Approach and Enhanced Generalized Benders Decomposition Algorithm. *Industrial &amp; Engineering Chemistry Research*, **2013**, 52, 16851-16869 | 3.9 | 41 |
| 35 | Integrated Scheduling and Dynamic Optimization of Sequential Batch Processes with Online Implementation. *AICHE Journal*, **2013**, 59, 2379-2406 | 3.6 | 30 |
| 34 | Integrated scheduling and control of a polymerization reactor with online closed-loop implementation. *Computer Aided Chemical Engineering*, **2013**, 481-486 | 0.6 | 2 |
| 33 | 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 |
| 32 | Efficient scheduling method of complex batch processes with general network structure via agent-based modeling **2013**, 59, 2884 | | 0 |
| 31 | Deciphering the uncertainties in life cycle energy and environmental analysis of organic photovoltaics. *Energy and Environmental Science*, **2012**, 5, 9163 | 35.4 | 85 |
| 30 | 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 |
| 29 | 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 |
| 28 | 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 |
| 27 | 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 |
| 26 | Multiobjective optimization of hydrocarbon biorefinery supply chain designs under uncertainty **2012**, | | 4 |
| 25 | Optimal Distribution-Inventory Planning of Industrial Gases. I. Fast Computational Strategies for Large-Scale Problems. *Industrial &amp; Engineering Chemistry Research*, **2011**, 50, 2910-2927 | 3.9 | 30 |
| 24 | Optimal Distribution-Inventory Planning of Industrial Gases. II. MINLP Models and Algorithms for Stochastic Cases. *Industrial &amp; Engineering Chemistry Research*, **2011**, 50, 2928-2945 | 3.9 | 41 |
| 23 | Balancing responsiveness and economics in process supply chain design with multi-echelon stochastic inventory. *AICHE Journal*, **2011**, 57, 178-192 | 3.6 | 37 |
| 22 | Stochastic inventory management for tactical process planning under uncertainties: MINLP models and algorithms. *AICHE Journal*, **2011**, 57, 1250-1277 | 3.6 | 82 |
| 21 | 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 |

| No. | Citation | IF | Cites |
|---|---|---|---|
| 20 | Assumptions and the levelized cost of energy for photovoltaics. *Energy and Environmental Science*, **2011**, 4, 3133 | 35.4 | 249 |
| 19 | Multisite Capacity, Production, and Distribution Planning with Reactor Modifications: MILP Model, Bilevel Decomposition Algorithm versus Lagrangean Decomposition Scheme. *Industrial &amp; Engineering Chemistry Research*, **2011**, 50, 4831-4849 | 3.9 | 40 |
| 18 | Life Cycle Optimization of Biomass-to-Liquid Supply Chains with Distributed–Centralized Processing Networks. *Industrial &amp; Engineering Chemistry Research*, **2011**, 50, 10102-10127 | 3.9 | 262 |
| 17 | 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 |
| 16 | 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 |
| 15 | 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 |
| 14 | Risk management for a global supply chain planning under uncertainty: Models and algorithms. *AICHE Journal*, **2009**, 55, 931-946 | 3.6 | 162 |
| 13 | Integrated multi-echelon supply chain design with inventories under uncertainty: MINLP models, computational strategies. *AICHE Journal*, **2009**, 56, NA-NA | 3.6 | 9 |
| 12 | 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 |
| 11 | Mixed-Integer Nonlinear Programming Models and Algorithms for Large-Scale Supply Chain Design with Stochastic Inventory Management. *Industrial &amp; Engineering Chemistry Research*, **2008**, 47, 7802-7817 | 3.9 | 102 |
| 10 | Design of responsive supply chains under demand uncertainty. *Computers and Chemical Engineering*, **2008**, 32, 3090-3111 | 4 | 174 |
| 9 | 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 |
| 8 | Density functional for structures of colloids confined in a slit-like pore. *Particuology: Science and Technology of Particles*, **2005**, 3, 265-270 | | 5 |
| 7 | 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 |
| 6 | 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 |
| 5 | 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 |
| 4 | New frontiers of quantum computing in chemical engineering. *Korean Journal of Chemical Engineering*, 1 | 2.8 | 3 |
| 3 | Next generation pure component property estimation models: With and without machine learning techniques. *AICHE Journal*, e17469 | 3.6 | 5 |

2       Optimal Design and Operational Planning of Responsive Process Supply Chains 107-134                                    2

1       Perspectives of quantum computing for chemical engineering. *AICHE Journal*,                              3.6      1