# Ignacio E Grossmann

List of Publications by Year
in descending order



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|---|---|---|---|
| 577 papers | 38,847 citations | 1697 104 h-index | 4535 171 g-index |
| 590 all docs | 590 docs citations | 590 times ranked | 9581 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Design of hydrogen supply chains under demand uncertaintyÂâ€“ a case study of passenger transport in Germany. ChemistrySelect, 2023, 8, 741-762. | 0.7 | 3 |
| 2 | Pyomo.GDP: an ecosystem for logic based modeling and optimization development. Optimization and Engineering, 2022, 23, 607-642. | 1.3 | 17 |
| 3 | Mixed-integer linear programming models and algorithms for generation and transmission expansion planning of power systems. European Journal of Operational Research, 2022, 297, 1071-1082. | 3.5 | 49 |
| 4 | Shale gas field development planning under production profile uncertainty. AICHE Journal, 2022, 68, e17439. | 1.8 | 2 |
| 5 | Mathematical modeling for renewable process design. , 2022, , 35-100. | | 2 |
| 6 | On representative day selection for capacity expansion planning of power systems under extreme operating conditions. International Journal of Electrical Power and Energy Systems, 2022, 137, 107697. | 3.3 | 20 |
| 7 | Integrating stochastic programming and reliability in the optimal synthesis of chemical processes. Computers and Chemical Engineering, 2022, 157, 107616. | 2.0 | 6 |
| 8 | Simultaneous synthesis and optimization of refrigeration cycles and heat exchangers networks. Applied Thermal Engineering, 2022, 206, 118052. | 3.0 | 8 |
| 9 | A Review on the Performance of Linear and Mixed Integer Two-Stage Stochastic Programming Software. Algorithms, 2022, 15, 103. | 1.2 | 10 |
| 10 | Applications of the RTN scheduling model in the chemical industry. , 2022, , 365-400. | | 1 |
| 11 | Synthesis of Heat-Integrated Water Networks Using a Modified Heat Exchanger Network Superstructure. Energies, 2022, 15, 3158. | 1.6 | 3 |
| 12 | Recent contributions to the optimal design of pipeline networks in the energy industry using mathematical programming. Top, 2022, 30, 618-648. | 1.1 | 5 |
| 13 | Alternative regularizations for Outer-Approximation algorithms for convex MINLP. Journal of Global Optimization, 2022, 84, 807-842. | 1.1 | 3 |
| 14 | Sample average approximation for stochastic nonconvex mixed integer nonlinear programming via outer-approximation. Optimization and Engineering, 2021, 22, 1245-1273. | 1.3 | 6 |
| 15 | Hierarchical decompositions for MPC of resource constrained control systems: applications to building energy management. Optimization and Engineering, 2021, 22, 187-215. | 1.3 | 9 |
| 16 | A MILP-based clustering strategy for integrating the operational management of crude oil supply. Computers and Chemical Engineering, 2021, 145, 107161. | 2.0 | 9 |
| 17 | Optimal design of water pipeline networks for the development of shale gas resources. AICHE Journal, 2021, 67, . | 1.8 | 7 |
| 18 | Process and product design for the simultaneous synthesis of xylitol and sorbitol from biomass. Computer Aided Chemical Engineering, 2021, , 159-165. | 0.3 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Algorithmic Approaches to Inventory Management Optimization. Processes, 2021, 9, 102. | 1.3 | 24 |
| 20 | Integrating Reliability and Uncertainty in Process Synthesis. Computer Aided Chemical Engineering, 2021, , 107-113. | 0.3 | 2 |
| 21 | Multi-objective optimization for the incorporation of safety and reliability considerations in process design. Computer Aided Chemical Engineering, 2021, 50, 101-106. | 0.3 | 2 |
| 22 | A Digital Twin Framework for Business Transactional Processes in Supply Chains. Computer Aided Chemical Engineering, 2021, 50, 1755-1760. | 0.3 | 5 |
| 23 | Flexibility index of <scp>blackâ€box</scp> models with parameter uncertainty through <scp>derivativeâ€free</scp> optimization. AICHE Journal, 2021, 67, e17189. | 1.8 | 7 |
| 24 | State of the art methods for combined water and energy systems optimisation in Kraft pulp mills. Optimization and Engineering, 2021, 22, 1831-1852. | 1.3 | 12 |
| 25 | Multiâ€period design and planning model of shale gas field development. AICHE Journal, 2021, 67, e17195. | 1.8 | 6 |
| 26 | Integrated Renewable Production of Sorbitol and Xylitol from Switchgrass. Industrial & Engineering Chemistry Research, 2021, 60, 5558-5573. | 1.8 | 12 |
| 27 | Optimal design of ethylene and propylene coproduction plants with generalized disjunctive programming and state equipment network models. Computers and Chemical Engineering, 2021, 149, 107295. | 2.0 | 8 |
| 28 | Novel flexibility index formulations for the selection of the operating range within a design space. Computers and Chemical Engineering, 2021, 149, 107284. | 2.0 | 12 |
| 29 | Multiperiod optimization of heat exchanger networks with integrated thermodynamic cycles and thermal storages. Computers and Chemical Engineering, 2021, 149, 107293. | 2.0 | 18 |
| 30 | Optimization of extended business processes in digital supply chains using mathematical programming. Computers and Chemical Engineering, 2021, 152, 107323. | 2.0 | 10 |
| 31 | Pyosyn: A new framework for conceptual design modeling and optimization. Computers and Chemical Engineering, 2021, 153, 107414. | 2.0 | 9 |
| 32 | Simultaneous optimisation of large-scale problems of heat-integrated water networks. Energy, 2021, 235, 121354. | 4.5 | 14 |
| 33 | Hybrid model generation for superstructure optimization with Generalized Disjunctive Programming. Computers and Chemical Engineering, 2021, 154, 107473. | 2.0 | 5 |
| 34 | Recent Advances in Computational Models for the Discrete and Continuous Optimization of Industrial Process Systems. Sxl Springer Per L'Innovazione, 2021, , 1-31. | 0.1 | 0 |
| 35 | A Review of Stochastic Programming Methods for Optimization of Process Systems Under Uncertainty. Frontiers in Chemical Engineering, 2021, 2, . | 1.3 | 46 |
| 36 | A biographical review of the research and impacts of Marco Duran. Optimization and Engineering, 2021, 22, 1233-1244. | 1.3 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Using regularization and second order information in outer approximation for convex MINLP. Mathematical Programming, 2020, 180, 285-310. | 1.6 | 20 |
| 38 | Electric power infrastructure planning under uncertainty: stochastic dual dynamic integer programming (SDDiP) and parallelization scheme. Optimization and Engineering, 2020, 21, 1243-1281. | 1.3 | 20 |
| 39 | Batch scheduling with quality-based changeovers. Computers and Chemical Engineering, 2020, 132, 106617. | 2.0 | 17 |
| 40 | Improving the performance of DICOPT in convex MINLP problems using a feasibility pump. Optimization Methods and Software, 2020, 35, 171-190. | 1.6 | 17 |
| 41 | Modeling Framework for Joint Product and Process Synthesis with Material Recovery Opportunities. Computer Aided Chemical Engineering, 2020, 48, 823-828. | 0.3 | 0 |
| 42 | Coproduction of Ethylene and Propylene based on Ethane and Propane Feedstocks. Computer Aided Chemical Engineering, 2020, , 907-912. | 0.3 | 3 |
| 43 | MINLP Model for Reliability Optimization of System Design and Maintenance Based on Markov Chain Representation. Computer Aided Chemical Engineering, 2020, 48, 1057-1062. | 0.3 | 2 |
| 44 | Optimization of Business Transactional Processes in a Digital Supply Chain. Computer Aided Chemical Engineering, 2020, 48, 1159-1164. | 0.3 | 2 |
| 45 | Cutpoint Temperature Surrogate Modeling for Distillation Yields and Properties. Industrial & Engineering Chemistry Research, 2020, 59, 18616-18628. | 1.8 | 17 |
| 46 | Novel MINLP formulations for flexibility analysis for measured and unmeasured uncertain parameters. Computers and Chemical Engineering, 2020, 135, 106727. | 2.0 | 14 |
| 47 | Integrated optimization of design, storage sizing, and maintenance policy as a Markov decision process considering varying failure rates. Computers and Chemical Engineering, 2020, 142, 107052. | 2.0 | 7 |
| 48 | Strengthening discrete-time scheduling formulations by introducing the concept of campaigns. Computers and Chemical Engineering, 2020, 143, 107101. | 2.0 | 3 |
| 49 | Large-scale selective maintenance optimization using bathtub-shaped failure rates. Computers and Chemical Engineering, 2020, 139, 106876. | 2.0 | 16 |
| 50 | A review on superstructure optimization approaches in process system engineering. Computers and Chemical Engineering, 2020, 136, 106808. | 2.0 | 116 |
| 51 | A computationally useful algebraic representation of nonlinear disjunctive convex sets using the perspective function. Computational Optimization and Applications, 2020, 76, 589-614. | 0.9 | 4 |
| 52 | Optimal scheduling of copper concentrate operations under uncertainty. Computers and Chemical Engineering, 2020, 140, 106919. | 2.0 | 5 |
| 53 | Industrial Demand Side Management of a Steel Plant Considering Alternative Power Modes and Electrode Replacement. Industrial & Engineering Chemistry Research, 2020, 59, 13642-13656. | 1.8 | 23 |
| 54 | Surrogate-model based MILP for the optimal design of ethylene production from shale gas. Computers and Chemical Engineering, 2020, 141, 107015. | 2.0 | 10 |

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|---|---|---|---|
| 55 | Environmental and Economic Water Management in Shale Gas Extraction. Sustainability, 2020, 12, 1686. | 1.6 | 17 |
| 56 | Integrated Redundancy and Storage Design Optimization for Reliable Air Separation Units Based on Markov Chainâ€"A Game Theoretic Solution. Industrial & Engineering Chemistry Research, 2020, 59, 2491-2504. | 1.8 | 3 |
| 57 | Integration of crude-oil scheduling and refinery planning by Lagrangean Decomposition. Computers and Chemical Engineering, 2020, 138, 106812. | 2.0 | 17 |
| 58 | Shale gas pad development planning under price uncertainty. AICHE Journal, 2020, 66, e16933. | 1.8 | 10 |
| 59 | Optimal Integrated Facility for Oxymethylene Ethers Production from Methanol. ACS Sustainable Chemistry and Engineering, 2020, 8, 6496-6504. | 3.2 | 5 |
| 60 | Integrated design and operation of renewables-based fuels and power production networks. Computers and Chemical Engineering, 2019, 122, 80-92. | 2.0 | 41 |
| 61 | Flexibility Analysis For Design Space Definition. Computer Aided Chemical Engineering, 2019, , 323-328. | 0.3 | 4 |
| 62 | A finite $$epsilon $$-convergence algorithm for two-stage stochastic convex nonlinear programs with mixed-binary first and second-stage variables. Journal of Global Optimization, 2019, 75, 921-947. | 1.1 | 9 |
| 63 | Multiperiod optimization model for oilfield production planning: bicriterion optimization and two-stage stochastic programming model. Optimization and Engineering, 2019, 20, 1227-1248. | 1.3 | 11 |
| 64 | Economic and environmental strategic water management in the shale gas industry: Application of cooperative game theory. AICHE Journal, 2019, 65, e16725. | 1.8 | 10 |
| 65 | A generalized Benders decomposition-based branch and cut algorithm for two-stage stochastic programs with nonconvex constraints and mixed-binary first and second stage variables. Journal of Global Optimization, 2019, 75, 247-272. | 1.1 | 17 |
| 66 | Implementation of RTO in a large hydrogen network considering uncertainty. Optimization and Engineering, 2019, 20, 1161-1190. | 1.3 | 10 |
| 67 | A preface to the special issue on enterprise-wide optimization. Optimization and Engineering, 2019, 20, 965-968. | 1.3 | 2 |
| 68 | Novel Approaches for the Integration of Planning and Scheduling. Industrial & Engineering Chemistry Research, 2019, 58, 19973-19984. | 1.8 | 10 |
| 69 | Novel Formulation for Optimal Schedule with Demand Side Management in Multiproduct Air Separation Processes. Industrial & Engineering Chemistry Research, 2019, 58, 3104-3117. | 1.8 | 20 |
| 70 | An overview of process intensification methods. Current Opinion in Chemical Engineering, 2019, 25, 87-94. | 3.8 | 65 |
| 71 | A bilevel decomposition method for the simultaneous heat integration and synthesis of steam/organic Rankine cycles. Computers and Chemical Engineering, 2019, 128, 228-245. | 2.0 | 28 |
| 72 | Global optimization algorithm for multi-period design and planning of centralized and distributed manufacturing networks. Computers and Chemical Engineering, 2019, 127, 295-310. | 2.0 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Multi-system shale gas supply chain planning with development and resource arrangements. Computers and Chemical Engineering, 2019, 127, 49-70. | 2.0 | 10 |
| 74 | Multi-operational planning of shale gas pad development. Computers and Chemical Engineering, 2019, 126, 83-101. | 2.0 | 20 |
| 75 | Discrete and continuous-time formulations for dealing with break periods: Preemptive and non-preemptive scheduling. European Journal of Operational Research, 2019, 278, 563-577. | 3.5 | 20 |
| 76 | Process Systems Engineering: Academic and industrial perspectives. Computers and Chemical Engineering, 2019, 126, 474-484. | 2.0 | 45 |
| 77 | Effective Generalized Disjunctive Programming Models for Modular Process Synthesis. Industrial & Engineering Chemistry Research, 2019, 58, 5873-5886. | 1.8 | 16 |
| 78 | Kaibel column: Modeling, optimization, and conceptual design of multi-product dividing wall columns. Computers and Chemical Engineering, 2019, 125, 31-39. | 2.0 | 18 |
| 79 | Integrated Renewable Production of ETBE from Switchgrass. ACS Sustainable Chemistry and Engineering, 2019, 7, 8943-8953. | 3.2 | 12 |
| 80 | Modeling for reliability optimization of system design and maintenance based on Markov chain theory. Computers and Chemical Engineering, 2019, 124, 381-404. | 2.0 | 43 |
| 81 | Modern Modeling Paradigms Using Generalized Disjunctive Programming. Processes, 2019, 7, 839. | 1.3 | 17 |
| 82 | Process Optimization for the Hydrothermal Production of Algae Fuels. Industrial & Engineering Chemistry Research, 2019, 58, 23276-23283. | 1.8 | 3 |
| 83 | Process systems engineering thinking and tools applied to sustainability problems: current landscape and future opportunities. Current Opinion in Chemical Engineering, 2019, 26, 170-179. | 3.8 | 39 |
| 84 | Integrated Power-to-Gas and Gas-to-Power with Air and Natural-Gas Storage. Industrial & Engineering Chemistry Research, 2019, 58, 1322-1340. | 1.8 | 1 |
| 85 | A review and comparison of solvers for convex MINLP. Optimization and Engineering, 2019, 20, 397-455. | 1.3 | 175 |
| 86 | An MINLP formulation for integrating the operational management of crude oil supply. Computers and Chemical Engineering, 2019, 123, 110-125. | 2.0 | 12 |
| 87 | Inventory policies and safety stock optimization for supply chain planning. AIChE Journal, 2019, 65, 99-112. | 1.8 | 28 |
| 88 | New MINLP Formulations for Flexibility Analysis for Measured and Unmeasured Uncertain Parameters. Computer Aided Chemical Engineering, 2019, 46, 121-126. | 0.3 | 0 |
| 89 | An improved L-shaped method for two-stage convex 0â€“1 mixed integer nonlinear stochastic programs. Computers and Chemical Engineering, 2018, 112, 165-179. | 2.0 | 19 |
| 90 | Global optimization algorithm for capacitated multi-facility continuous location-allocation problems. Journal of Global Optimization, 2018, 71, 871-889. | 1.1 | 17 |

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|---|---|---|---|
| 91 | Expanding scope and computational challenges in process scheduling. Computers and Chemical Engineering, 2018, 114, 14-42. | 2.0 | 78 |
| 92 | Long-Term Electricity Procurement for Large Industrial Consumers under Uncertainty. Industrial & Engineering Chemistry Research, 2018, 57, 3333-3347. | 1.8 | 36 |
| 93 | Continuousâ€time formulations for the optimal planning of multiple refracture treatments in a shale gas well. AICHE Journal, 2018, 64, 1511-1516. | 1.8 | 14 |
| 94 | Integrated scheduling of rolling sector in steel production with consideration of energy consumption under time-of-use electricity prices. Computers and Chemical Engineering, 2018, 111, 55-65. | 2.0 | 35 |
| 95 | Novel MILP Scheduling Model for Power-Intensive Processes under Time-Sensitive Electricity Prices. Industrial & Engineering Chemistry Research, 2018, 57, 1581-1592. | 1.8 | 16 |
| 96 | New algorithm for the flexibility index problem of quadratic systems. AICHE Journal, 2018, 64, 2486-2499. | 1.8 | 9 |
| 97 | Efficient formulations for dynamic warehouse location under discrete transportation costs. Computers and Chemical Engineering, 2018, 111, 311-323. | 2.0 | 15 |
| 98 | Improved quadratic cuts for convex mixed-integer nonlinear programs. Computers and Chemical Engineering, 2018, 109, 77-95. | 2.0 | 17 |
| 99 | Time for global action: an optimised cooperative approach towards effective climate change mitigation. Energy and Environmental Science, 2018, 11, 572-581. | 15.6 | 52 |
| 100 | Disjunctive model for the simultaneous optimization and heat integration with unclassified streams and area estimation. Computers and Chemical Engineering, 2018, 108, 217-231. | 2.0 | 19 |
| 101 | Mixed-integer nonlinear programming models for optimal design of reliable chemical plants. Computers and Chemical Engineering, 2018, 116, 3-16. | 2.0 | 31 |
| 102 | Search for reaction pathways with P-graphs and reaction blocks: methanation of carbon dioxide with hydrogen. Journal of Mathematical Chemistry, 2018, 56, 1011-1102. | 0.7 | 8 |
| 103 | Optimal integration of renewable based processes for fuels and power production: Spain case study. Applied Energy, 2018, 213, 595-610. | 5.1 | 57 |
| 104 | Expanding the Scope of Electric Power Infrastructure Planning. Computer Aided Chemical Engineering, 2018, 44, 1309-1314. | 0.3 | 3 |
| 105 | An Improved L-shaped Method for Two-stage Convex 0-1 Mixed Integer Nonlinear Stochastic Programs. Computer Aided Chemical Engineering, 2018, , 1501-1506. | 0.3 | 0 |
| 106 | Optimal Production Scheduling of Industrial Gases under Uncertainty with Flexibility Constraints. Computer Aided Chemical Engineering, 2018, 44, 1513-1518. | 0.3 | 2 |
| 107 | Integrated scheduling of on-line blending and distribution of oil products in refinery operation. Computer Aided Chemical Engineering, 2018, 44, 1213-1218. | 0.3 | 1 |
| 108 | Pyomo.GDP: Disjunctive Models in Python. Computer Aided Chemical Engineering, 2018, 44, 889-894. | 0.3 | 17 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Sustainable Optimal Strategic Planning for Shale Water Management. Computer Aided Chemical Engineering, 2018, , 657-662. | 0.3 | 2 |
| 110 | Markov Chain MINLP Model for Reliability Optimization of System Design and Maintenance. Computer Aided Chemical Engineering, 2018, 44, 1483-1488. | 0.3 | 7 |
| 111 | Preface of the Special JOGO issue in Memory of Professor Christodoulos A. Floudas (1959â€“2016). Journal of Global Optimization, 2018, 71, 1013-1013. | 1.1 | 1 |
| 112 | Logistics optimization for dispositions and depooling of distillates in oil-refineries: closing the production scheduling and distribution gap. Computer Aided Chemical Engineering, 2018, 43, 1135-1140. | 0.3 | 6 |
| 113 | Holistic Planning Model for Sustainable Water Management in the Shale Gas Industry. Industrial & Engineering Chemistry Research, 2018, 57, 13131-13143. | 1.8 | 22 |
| 114 | A comparative study between GDP and NLP formulations for conceptual design of distillation columns. Computer Aided Chemical Engineering, 2018, 44, 865-870. | 0.3 | 4 |
| 115 | Multi-System Development Planning for Optimizing Shale Gas Production. Computer Aided Chemical Engineering, 2018, , 1303-1308. | 0.3 | 0 |
| 116 | Next Generation Multi-Scale Process Systems Engineering Framework. Computer Aided Chemical Engineering, 2018, , 2209-2214. | 0.3 | 16 |
| 117 | Successive LP Approximation for Nonconvex Blending in MILP Scheduling Optimization Using Factors for Qualities in the Process Industry. Industrial & Engineering Chemistry Research, 2018, 57, 11076-11093. | 1.8 | 15 |
| 118 | Optimal synthesis of rotating packed bed and packed bed: a case illustrating the integration of PI and PSE. Computer Aided Chemical Engineering, 2018, 44, 2377-2382. | 0.3 | 8 |
| 119 | Scheduling and Feed Quality Optimization of Concentrate Raw Materials in the Copper Refining Industry. Industrial & Engineering Chemistry Research, 2018, 57, 11686-11701. | 1.8 | 6 |
| 120 | Deterministic electric power infrastructure planning: Mixed-integer programming model and nested decomposition algorithm. European Journal of Operational Research, 2018, 271, 1037-1054. | 3.5 | 89 |
| 121 | Impact of model resolution on scenario outcomes for electricity sector system expansion. Energy, 2018, 163, 1231-1244. | 4.5 | 48 |
| 122 | Mixed-Integer Nonlinear Decomposition Toolbox for Pyomo (MindtPy). Computer Aided Chemical Engineering, 2018, 44, 895-900. | 0.3 | 12 |
| 123 | Simultaneous optimisation and heat integration of evaporation systems including mechanical vapour recompression and background process. Energy, 2018, 158, 1160-1191. | 4.5 | 24 |
| 124 | Product decomposition strategy for optimization of supply chain planning. Frontiers of Engineering Management, 2018, 5, 466. | 3.3 | 1 |
| 125 | Global optimization of non-convex generalized disjunctive programs: a review on reformulations and relaxation techniques. Journal of Global Optimization, 2017, 67, 43-58. | 1.1 | 20 |
| 126 | Symmetry breaking for generalized disjunctive programming formulation of the strip packing problem. Annals of Operations Research, 2017, 258, 747-759. | 2.6 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | On the solution of nonconvex cardinality Boolean quadratic programming problems: a computational study. Computational Optimization and Applications, 2017, 66, 1-37. | 0.9 | 13 |
| 128 | Towards zero CO2 emissions in the production of methanol from switchgrass. CO2 to methanol. Computers and Chemical Engineering, 2017, 105, 308-316. | 2.0 | 26 |
| 129 | Optimal integration of a self sustained algae based facility with solar and/or wind energy. Journal of Cleaner Production, 2017, 145, 336-347. | 4.6 | 31 |
| 130 | Petroleum supply planning: reformulations and a novel decomposition algorithm. Optimization and Engineering, 2017, 18, 215-240. | 1.3 | 10 |
| 131 | Optimal synthesis of rotating packed bed reactor. Computers and Chemical Engineering, 2017, 105, 152-160. | 2.0 | 24 |
| 132 | Recent Developments and Challenges in Optimization-Based Process Synthesis. Annual Review of Chemical and Biomolecular Engineering, 2017, 8, 249-283. | 3.3 | 126 |
| 133 | Capacity planning with competitive decision-makers: Trilevel MILP formulation, degeneracy, and solution approaches. European Journal of Operational Research, 2017, 262, 449-463. | 3.5 | 21 |
| 134 | A piecewise McCormick relaxation-based strategy for scheduling operations in a crude oil terminal. Computers and Chemical Engineering, 2017, 106, 309-321. | 2.0 | 19 |
| 135 | Stochastic programming models for optimal shale well development and refracturing planning under uncertainty. AICHE Journal, 2017, 63, 4799-4813. | 1.8 | 23 |
| 136 | Models and computational strategies for multistage stochastic programming under endogenous and exogenous uncertainties. Computers and Chemical Engineering, 2017, 103, 233-274. | 2.0 | 80 |
| 137 | Mixed-integer programming models for line pressure optimization in shale gas gathering systems. Journal of Petroleum Science and Engineering, 2017, 157, 1021-1032. | 2.1 | 18 |
| 138 | Optimal Synthesis and Operation of Wastewater Treatment Process with Dynamic Influent. Industrial & Engineering Chemistry Research, 2017, 56, 8663-8676. | 1.8 | 10 |
| 139 | Optimization models for impaired water management in active shale gas development areas. Journal of Petroleum Science and Engineering, 2017, 156, 983-995. | 2.1 | 15 |
| 140 | Optimal Demand Side Management for Cryogenic Air Separation Plants. , 2017, , 535-564. | | 3 |
| 141 | Multiscale production routing in multicommodity supply chains with complex production facilities. Computers and Operations Research, 2017, 79, 207-222. | 2.4 | 48 |
| 142 | Offshore oilfield development planning under uncertainty and fiscal considerations. Optimization and Engineering, 2017, 18, 3-33. | 1.3 | 15 |
| 143 | A novel disjunctive model for the simultaneous optimization and heat integration. Computers and Chemical Engineering, 2017, 96, 149-168. | 2.0 | 27 |
| 144 | Mathematical Programming Techniques for Optimization under Uncertainty and Their Application in Process Systems Engineering. Theoretical Foundations of Chemical Engineering, 2017, 51, 893-909. | 0.2 | 30 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Optimal scheduling for power-intensive processes under time-sensitive electricity prices. Computer Aided Chemical Engineering, 2017, , 1423-1428. | 0.3 | 1 |
| 146 | A New Disjunctive Formulation for the Simultaneous Optimization and Heat Integration with Cold/Hot and Unclassified Streams. Computer Aided Chemical Engineering, 2017, 40, 2167-2172. | 0.3 | 0 |
| 147 | Integrated Design, Planning, and Scheduling of Renewables-based Fuels and Power Production Networks. Computer Aided Chemical Engineering, 2017, 40, 1879-1884. | 0.3 | 8 |
| 148 | Enterprise-Wide Optimization for Operations of Crude-Oil Refineries: Closing the Procurement and Scheduling Gap. Computer Aided Chemical Engineering, 2017, 40, 1249-1254. | 0.3 | 6 |
| 149 | Decision Automation for Oil and Gas Well Startup Scheduling Using MILP. Computer Aided Chemical Engineering, 2017, , 1399-1404. | 0.3 | 2 |
| 150 | Perspectives in multilevel decision-making in the process industry. Frontiers of Engineering Management, 2017, 4, 256. | 3.3 | 30 |
| 151 | Systematic Design of Biorefinery Downstream Processes. , 2017, , 683-712. | | 0 |
| 152 | Disjunctive Models for Strategic Midstream Delivery Agreements in Shale Gas Development. Computer Aided Chemical Engineering, 2016, 38, 931-936. | 0.3 | 2 |
| 153 | Global Optimization for a Continuous Location-Allocation Model for Centralized and Distributed Manufacturing. Computer Aided Chemical Engineering, 2016, , 1009-1014. | 0.3 | 8 |
| 154 | Macroâ€economic multiâ€objective inputâ€“output model for minimizing CO<sub>2</sub> emissions: Application to the U.S. economy. AICHE Journal, 2016, 62, 3639-3656. | 1.8 | 20 |
| 155 | Multiâ€period planning, design, and strategic models for longâ€term, qualityâ€sensitive shale gas development. AICHE Journal, 2016, 62, 2296-2323. | 1.8 | 51 |
| 156 | Optimizing inventory policies in process networks under uncertainty. Computers and Chemical Engineering, 2016, 92, 256-272. | 2.0 | 17 |
| 157 | On the relation between flexibility analysis and robust optimization for linear systems. AICHE Journal, 2016, 62, 3109-3123. | 1.8 | 66 |
| 158 | Simultaneous optimal design of multi-stage organic Rankine cycles and working fluid mixtures for low-temperature heat sources. Computers and Chemical Engineering, 2016, 89, 106-126. | 2.0 | 15 |
| 159 | Lagrangean relaxation of the hull-reformulation of linear generalized disjunctive programs and its use in disjunctive branch and bound. European Journal of Operational Research, 2016, 253, 314-327. | 3.5 | 4 |
| 160 | Planning and Scheduling for Industrial Demand Side Management: Advances and Challenges. , 2016, , 383-414. | | 33 |
| 161 | A cross-decomposition scheme with integrated primalâ€“dual multi-cuts for two-stage stochastic programming investment planning problems. Mathematical Programming, 2016, 157, 95-119. | 1.6 | 15 |
| 162 | Cutting planes for improved global logic-based outer-approximation for the synthesis of process networks. Computers and Chemical Engineering, 2016, 90, 201-221. | 2.0 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Optimal Integration of Algaeâ€“Switchgrass Facility for the Production of Methanol and Biodiesel. ACS Sustainable Chemistry and Engineering, 2016, 4, 5651-5658. | 3.2 | 12 |
| 164 | Optimal planning and feedstock-mix selection for multiproduct polymer production. Computers and Chemical Engineering, 2016, 95, 182-201. | 2.0 | 1 |
| 165 | Scheduling of cracking production process with feedstocks and energy constraints. Computers and Chemical Engineering, 2016, 94, 92-103. | 2.0 | 17 |
| 166 | A tribute to professor Roger Sargent: Intellectual leader of process systems engineering. AICHE Journal, 2016, 62, 2951-2958. | 1.8 | 6 |
| 167 | A tribute to Roger Sargent. AICHE Journal, 2016, 62, 2950-2950. | 1.8 | 2 |
| 168 | Enterprise-wide optimization for industrial demand side management: Fundamentals, advances, and perspectives. Chemical Engineering Research and Design, 2016, 116, 114-131. | 2.7 | 112 |
| 169 | Optimization models for planning shale gas well refracture treatments. AICHE Journal, 2016, 62, 4297-4307. | 1.8 | 34 |
| 170 | Data-driven construction of Convex Region Surrogate models. Optimization and Engineering, 2016, 17, 289-332. | 1.3 | 50 |
| 171 | Recent advances in mathematical programming techniques for the optimization of process systems under uncertainty. Computers and Chemical Engineering, 2016, 91, 3-14. | 2.0 | 155 |
| 172 | Cutting Plane Algorithm for Convex Generalized Disjunctive Programs. INFORMS Journal on Computing, 2016, 28, 209-222. | 1.0 | 15 |
| 173 | Process simulator-based optimization of biorefinery downstream processes under the Generalized Disjunctive Programming framework. Computers and Chemical Engineering, 2016, 88, 73-85. | 2.0 | 26 |
| 174 | Supplier selection in the processed food industry under uncertainty. European Journal of Operational Research, 2016, 252, 801-814. | 3.5 | 102 |
| 175 | An MILP-MINLP decomposition method for the global optimization of a source based model of the multiperiod blending problem. Computers and Chemical Engineering, 2016, 87, 13-35. | 2.0 | 45 |
| 176 | Rolling Horizon Approach for Productionâ€“Distribution Coordination of Industrial Gases Supply Chains. Industrial & Engineering Chemistry Research, 2016, 55, 2646-2660. | 1.8 | 33 |
| 177 | Risk-based integrated production scheduling and electricity procurement for continuous power-intensive processes. Computers and Chemical Engineering, 2016, 86, 90-105. | 2.0 | 50 |
| 178 | An adjustable robust optimization approach to scheduling of continuous industrial processes providing interruptible load. Computers and Chemical Engineering, 2016, 86, 106-119. | 2.0 | 95 |
| 179 | Mixed-integer bilevel optimization for capacity planning with rational markets. Computers and Chemical Engineering, 2016, 86, 33-47. | 2.0 | 40 |
| 180 | Optimal Production of Furfural and DMF from Algae and Switchgrass. Industrial & Engineering Chemistry Research, 2016, 55, 3192-3202. | 1.8 | 23 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | A reactive optimization strategy for the simultaneous planning, scheduling and control of short-period continuous reactors. Computers and Chemical Engineering, 2016, 84, 507-515. | 2.0 | 22 |
| 182 | A discrete-time scheduling model for continuous power-intensive process networks with various power contracts. Computers and Chemical Engineering, 2016, 84, 382-393. | 2.0 | 84 |
| 183 | Solution of Chance-Constrained Mixed-Integer Nonlinear Programming Problems. Computer Aided Chemical Engineering, 2016, 38, 91-96. | 0.3 | 3 |
| 184 | Investment optimization model for freshwater acquisition and wastewater handling in shale gas production. AICHE Journal, 2015, 61, 1770-1782. | 1.8 | 68 |
| 185 | Phenomenological Decomposition Heuristic for Process Design Synthesis of Oil-Refinery Units. Computer Aided Chemical Engineering, 2015, , 1877-1882. | 0.3 | 8 |
| 186 | Alternative mixed-integer linear programming models of a maritime inventory routing problem. Computers and Chemical Engineering, 2015, 77, 147-161. | 2.0 | 25 |
| 187 | Optimization Models for Process Water Networks and Their Application toÂBiofuel Processes. Computer Aided Chemical Engineering, 2015, , 3-35. | 0.3 | 0 |
| 188 | Optimal quantity discount coordination for supply chain optimization with one manufacturer and multiple suppliers under demand uncertainty. International Journal of Advanced Manufacturing Technology, 2015, 76, 1173-1184. | 1.5 | 53 |
| 189 | Optimization of steel production scheduling with complex time-sensitive electricity cost. Computers and Chemical Engineering, 2015, 76, 117-136. | 2.0 | 121 |
| 190 | Optimal Simultaneous Production of Biodiesel (FAEE) and Bioethanol from Switchgrass. Industrial & Engineering Chemistry Research, 2015, 54, 4337-4346. | 1.8 | 7 |
| 191 | Computational strategies for improved MINLP algorithms. Computers and Chemical Engineering, 2015, 75, 40-48. | 2.0 | 23 |
| 192 | Air separation with cryogenic energy storage: Optimal scheduling considering electric energy and reserve markets. AICHE Journal, 2015, 61, 1547-1558. | 1.8 | 141 |
| 193 | Improved Big-M reformulation for generalized disjunctive programs. Computers and Chemical Engineering, 2015, 76, 98-103. | 2.0 | 51 |
| 194 | Treatment of High-Strength Wastewater from the Sugar-Sweetened Beverage Industry by an Alcoholic Fermentation Process. Industrial & Engineering Chemistry Research, 2015, 54, 7687-7693. | 1.8 | 14 |
| 195 | Data-Driven Simulation and Optimization Approaches To Incorporate Production Variability in Sales and Operations Planning. Industrial & Engineering Chemistry Research, 2015, 54, 7261-7272. | 1.8 | 9 |
| 196 | Optimal production of Furfural and DMF from algae and switchgrass. Computer Aided Chemical Engineering, 2015, 37, 1043-1048. | 0.3 | 1 |
| 197 | Water and energy integration: A comprehensive literature review of non-isothermal water network synthesis. Computers and Chemical Engineering, 2015, 82, 144-171. | 2.0 | 92 |
| 198 | Optimal Scheduling of Air Separation with Cryogenic Energy Storage. Computer Aided Chemical Engineering, 2015, 37, 2267-2272. | 0.3 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Recent Advances in Mathematical Programming Techniques for the Optimization of Process Systems under Uncertainty. Computer Aided Chemical Engineering, 2015, 37, 1-14. | 0.3 | 13 |
| 200 | Generalized capital investment planning of oil-refineries using MILP and sequence-dependent setups. Computers and Chemical Engineering, 2015, 80, 140-154. | 2.0 | 14 |
| 201 | Computational strategies for large-scale MILP transshipment models for heat exchanger network synthesis. Computers and Chemical Engineering, 2015, 82, 68-83. | 2.0 | 31 |
| 202 | Data-driven individual and joint chance-constrained optimization via kernel smoothing. Computers and Chemical Engineering, 2015, 78, 51-69. | 2.0 | 56 |
| 203 | Simultaneous process optimization and heat integration based on rigorous process simulations. Computers and Chemical Engineering, 2015, 81, 180-199. | 2.0 | 33 |
| 204 | Waterâ€“energy nexus in biofuels production and renewable based power. Sustainable Production and Consumption, 2015, 2, 96-108. | 5.7 | 19 |
| 205 | Optimal procurement contract selection with price optimization under uncertainty for process networks. Computers and Chemical Engineering, 2015, 82, 330-343. | 2.0 | 21 |
| 206 | Integrated Operational and Financial Hedging for Risk Management in Crude Oil Procurement. Industrial & Engineering Chemistry Research, 2015, 54, 9191-9201. | 1.8 | 11 |
| 207 | Algorithmic Approach for Improved Mixed-Integer Reformulations of Convex Generalized Disjunctive Programs. INFORMS Journal on Computing, 2015, 27, 59-74. | 1.0 | 10 |
| 208 | Hierarchical Decomposition Approach for Crude Oil Scheduling: A SINOPEC Case. Interfaces, 2014, 44, 269-285. | 1.6 | 5 |
| 209 | Optimization Models for Optimal Investment, Drilling, and Water Management in Shale Gas Supply Chains. Computer Aided Chemical Engineering, 2014, 34, 124-133. | 0.3 | 3 |
| 210 | Sustainable Development of the Shale Gas Supply Chain and the Optimal Drilling Strategy for Nonconventional Wells. Computer Aided Chemical Engineering, 2014, 33, 121-126. | 0.3 | 0 |
| 211 | Empirical study of the behavior of capacitated production-inventory systems. , 2014, , . | | 0 |
| 212 | Strategic planning, design, and development of the shale gas supply chain network. AICHE Journal, 2014, 60, 2122-2142. | 1.8 | 123 |
| 213 | Optimal maintenance scheduling of a gas engine power plant using generalized disjunctive programming. AICHE Journal, 2014, 60, 2083-2097. | 1.8 | 53 |
| 214 | Self-sufficient integrated algae based facility for diesel susbtitutes. Computer Aided Chemical Engineering, 2014, 34, 495-500. | 0.3 | 0 |
| 215 | A Bi-Criterion Optimization Planning Model for Process Networks with Multiple Scenarios and Environmental Impact. Computer Aided Chemical Engineering, 2014, 33, 403-408. | 0.3 | 0 |
| 216 | Optimal multi-scale capacity planning for power-intensive continuous processes under time-sensitive electricity prices and demand uncertainty. Part II: Enhanced hybrid bi-level decomposition. Computers and Chemical Engineering, 2014, 65, 102-111. | 2.0 | 20 |

| # | Article | IF | Citations |
|---|---|---|---|
| 217 | Data-driven multi-stage scenario tree generation via statistical property and distribution matching. Computers and Chemical Engineering, 2014, 68, 7-23. | 2.0 | 36 |
| 218 | Optimal simultaneous production of i-butene and ethanol from switchgrass. Biomass and Bioenergy, 2014, 61, 93-103. | 2.9 | 31 |
| 219 | Alternate approximation of concave cost functions for process design and supply chain optimization problems. Computers and Chemical Engineering, 2014, 60, 376-380. | 2.0 | 11 |
| 220 | A new decomposition algorithm for multistage stochastic programs with endogenous uncertainties. Computers and Chemical Engineering, 2014, 62, 62-79. | 2.0 | 46 |
| 221 | Optimal supply chain design and management over a multi-period horizon under demand uncertainty. Part I: MINLP and MILP models. Computers and Chemical Engineering, 2014, 62, 194-210. | 2.0 | 33 |
| 222 | Multi-period synthesis of optimally integrated biomass and bioenergy supply network. Computers and Chemical Engineering, 2014, 66, 57-70. | 2.0 | 117 |
| 223 | Multistage stochastic programming approach for offshore oilfield infrastructure planning under production sharing agreements and endogenous uncertainties. Journal of Petroleum Science and Engineering, 2014, 124, 180-197. | 2.1 | 46 |
| 224 | A Novel Cross-decomposition Multi-cut Scheme for Two-Stage Stochastic Programming. Computer Aided Chemical Engineering, 2014, 33, 241-246. | 0.3 | 6 |
| 225 | Review of optimization models for integrated process water networks and their application to biofuel processes. Current Opinion in Chemical Engineering, 2014, 5, 101-109. | 3.8 | 18 |
| 226 | Challenges in the application of mathematical programming in the enterprise-wide optimization of process industries. Theoretical Foundations of Chemical Engineering, 2014, 48, 555-573. | 0.2 | 27 |
| 227 | Global Optimal Scheduling of Crude Oil Blending Operations with RTN Continuous-time and Multiparametric Disaggregation. Industrial & Engineering Chemistry Research, 2014, 53, 15127-15145. | 1.8 | 64 |
| 228 | Distillation Blending and Cutpoint Temperature Optimization Using Monotonic Interpolation. Industrial & Engineering Chemistry Research, 2014, 53, 15146-15156. | 1.8 | 19 |
| 229 | Integrated Synthesis of Biodiesel, Bioethanol, Isobutene, and Glycerol Ethers from Algae. Industrial & Engineering Chemistry Research, 2014, 53, 14397-14407. | 1.8 | 20 |
| 230 | MINLP Formulation for Simultaneous Planning, Scheduling, and Control of Short-Period Single-Unit Processing Systems. Industrial & Engineering Chemistry Research, 2014, 53, 14679-14694. | 1.8 | 41 |
| 231 | Water Network Optimization with Wastewater Regeneration Models. Industrial & Engineering Chemistry Research, 2014, 53, 17680-17695. | 1.8 | 51 |
| 232 | Simultaneous production and distribution of industrial gas supply-chains. Computers and Chemical Engineering, 2014, 69, 39-58. | 2.0 | 37 |
| 233 | Optimization models for shale gas water management. AICHE Journal, 2014, 60, 3490-3501. | 1.8 | 117 |
| 234 | Evolving trends in chemical engineering education. AICHE Journal, 2014, 60, 3692-3700. | 1.8 | 36 |

| # | Article | IF | Citations |
|---|---|---|---|
| 235 | Design of an optimal process for enhanced production of bioethanol and biodiesel from algae oil via glycerol fermentation. Applied Energy, 2014, 135, 108-114. | 5.1 | 40 |
| 236 | Optimality-based bound contraction with multiparametric disaggregation for the global optimization of mixed-integer bilinear problems. Journal of Global Optimization, 2014, 59, 277-306. | 1.1 | 27 |
| 237 | Design of Resilient Supply Chains with Risk of Facility Disruptions. Industrial & Engineering Chemistry Research, 2014, 53, 17240-17251. | 1.8 | 64 |
| 238 | Scope for industrial applications of production scheduling models and solution methods. Computers and Chemical Engineering, 2014, 62, 161-193. | 2.0 | 411 |
| 239 | Optimization of Distillation Processes. , 2014, , 437-496. | | 10 |
| 240 | Optimal Simultaneous Production of Hydrogen and Liquid Fuels from Glycerol: Integrating the Use of Biodiesel Byproducts. Industrial & Engineering Chemistry Research, 2014, 53, 7730-7745. | 1.8 | 16 |
| 241 | Simultaneous Optimization and Heat Integration for the Coproduction of Diesel Substitutes: Biodiesel (FAME and FAEE) and Glycerol Ethers from Algae Oil. Industrial & Engineering Chemistry Research, 2014, 53, 11371-11383. | 1.8 | 39 |
| 242 | Logic-Based Outer-Approximation Algorithm for Solving Discrete-Continuous Dynamic Optimization Problems. Industrial & Engineering Chemistry Research, 2014, 53, 5067-5080. | 1.8 | 3 |
| 243 | Review of Mixedâ€Integer Nonlinear and Generalized Disjunctive Programming Methods. Chemie-Ingenieur-Technik, 2014, 86, 991-1012. | 0.4 | 134 |
| 244 | A heuristic Lagrangean approach for the synthesis of multiperiod heat exchanger networks. Applied Thermal Engineering, 2014, 63, 177-191. | 3.0 | 28 |
| 245 | Optimal multi-scale capacity planning for power-intensive continuous processes under time-sensitive electricity prices and demand uncertainty. Part I: Modeling. Computers and Chemical Engineering, 2014, 65, 89-101. | 2.0 | 81 |
| 246 | Lagrangian relaxation based decomposition for well scheduling in shale-gas systems. Computers and Chemical Engineering, 2014, 63, 234-249. | 2.0 | 28 |
| 247 | An SKU decomposition algorithm for the tactical planning in the FMCG industry. Computers and Chemical Engineering, 2014, 62, 80-95. | 2.0 | 14 |
| 248 | Evolution of concepts and models for quantifying resiliency and flexibility of chemical processes. Computers and Chemical Engineering, 2014, 70, 22-34. | 2.0 | 107 |
| 249 | Integration of different models in the design of chemical processes: Application to the design of a power plant. Applied Energy, 2014, 124, 256-273. | 5.1 | 19 |
| 250 | A mathematical programming model for optimal layout considering quantitative risk analysis. Computers and Chemical Engineering, 2014, 68, 165-181. | 2.0 | 37 |
| 251 | Optimal integration for biodiesel production using bioethanol. AICHE Journal, 2013, 59, 834-844. | 1.8 | 37 |
| 252 | Global optimization of bilinear programs with a multiparametric disaggregation technique. Journal of Global Optimization, 2013, 57, 1039-1063. | 1.1 | 99 |

| # | Article | IF | Citations |
|---|---|---|---|
| 253 | Multicut Benders decomposition algorithm for process supply chain planning under uncertainty. Annals of Operations Research, 2013, 210, 191-211. | 2.6 | 82 |
| 254 | Multiscale strategic planning model for the design of integrated ethanol and gasoline supply chain. AIChE Journal, 2013, 59, 4655-4672. | 1.8 | 26 |
| 255 | Design of Supply Chains under the Risk of Facility Disruptions. Computer Aided Chemical Engineering, 2013, , 577-582. | 0.3 | 7 |
| 256 | Systematic modeling of discreteâ€continuous optimization models through generalized disjunctive programming. AIChE Journal, 2013, 59, 3276-3295. | 1.8 | 137 |
| 257 | A Lagrangean decomposition approach for oil supply chain investment planning under uncertainty with risk considerations. Computers and Chemical Engineering, 2013, 50, 184-195. | 2.0 | 76 |
| 258 | Optimal design and operation of a steel plant integrated with a polygeneration system. AIChE Journal, 2013, 59, 3659-3670. | 1.8 | 33 |
| 259 | Optimal engineered algae composition for the integrated simultaneous production of bioethanol and biodiesel. AIChE Journal, 2013, 59, 2872-2883. | 1.8 | 57 |
| 260 | Hybrid Bilevel-Lagrangean Decomposition Scheme for the Integration of Planning and Scheduling of a Network of Batch Plants. Industrial & Engineering Chemistry Research, 2013, 52, 2152-2167. | 1.8 | 29 |
| 261 | An efficient reformulation of the multiechelon stochastic inventory system with uncertain demands. AIChE Journal, 2013, 59, 23-28. | 1.8 | 7 |
| 262 | A discretization-based approach for the optimization of the multiperiod blend scheduling problem. Computers and Chemical Engineering, 2013, 53, 122-142. | 2.0 | 67 |
| 263 | On the Computational Studies of Deterministic Global Optimization of Head Dependent Short-Term Hydro Scheduling. IEEE Transactions on Power Systems, 2013, 28, 4336-4347. | 4.6 | 43 |
| 264 | Improved Swing-Cut Modeling for Planning and Scheduling of Oil-Refinery Distillation Units. Industrial & Engineering Chemistry Research, 2013, 52, 18324-18333. | 1.8 | 42 |
| 265 | Simultaneous synthesis of heat exchanger networks with operability considerations: Flexibility and controllability. Computers and Chemical Engineering, 2013, 55, 158-180. | 2.0 | 58 |
| 266 | Using convex nonlinear relaxations in the global optimization of nonconvex generalized disjunctive programs. Computers and Chemical Engineering, 2013, 49, 70-84. | 2.0 | 8 |
| 267 | Optimal use of hybrid feedstock, switchgrass and shale gas for the simultaneous production of hydrogen and liquid fuels. Energy, 2013, 55, 378-391. | 4.5 | 34 |
| 268 | Optimal scheduling of industrial combined heat and power plants under time-sensitive electricity prices. Energy, 2013, 54, 194-211. | 4.5 | 217 |
| 269 | A mixed-integer model predictive control formulation for linear systems. Computers and Chemical Engineering, 2013, 55, 1-18. | 2.0 | 5 |
| 270 | On the Systematic Synthesis of Sustainable Biorefineries. Industrial & Engineering Chemistry Research, 2013, 52, 3044-3064. | 1.8 | 92 |

| # | Article | IF | Citations |
|---|---|---|---|
| 271 | An alternative disjunctive optimization model for heat integration with variable temperatures. Computers and Chemical Engineering, 2013, 56, 12-26. | 2.0 | 35 |
| 272 | Computational strategies for non-convex multistage MINLP models with decision-dependent uncertainty andÂgradual uncertainty resolution. Annals of Operations Research, 2013, 203, 141-166. | 2.6 | 32 |
| 273 | Cascading Knapsack Inequalities: reformulation ofÂaÂcrude oil distribution problem. Annals of Operations Research, 2013, 203, 217-234. | 2.6 | 14 |
| 274 | ASI: Toward the optimal integrated production of biodiesel with internal recycling of methanol produced from glycerol. Environmental Progress and Sustainable Energy, 2013, 32, 891-901. | 1.3 | 26 |
| 275 | Synthesis of complex thermally coupled distillation systems including divided wall columns. AICHE Journal, 2013, 59, 1139-1159. | 1.8 | 65 |
| 276 | Water Targeting Models for Simultaneous Flowsheet Optimization. Industrial & Engineering Chemistry Research, 2013, 52, 3209-3224. | 1.8 | 40 |
| 277 | A Multiproduct Feedstock Optimization Model for Polymer Production. Computer Aided Chemical Engineering, 2013, , 583-588. | 0.3 | 1 |
| 278 | Multi-period Synthesis of a Biorefinery's Supply Networks. Computer Aided Chemical Engineering, 2013, 32, 73-78. | 0.3 | 8 |
| 279 | Automated optimization model to perform sensitivity analysis on cost of investment required to upgrade treatment plants in water networks.. Computer Aided Chemical Engineering, 2012, 30, 1063-1067. | 0.3 | 2 |
| 280 | Scheduling in the FMCG Industry: An Industrial Case Study. Industrial & Engineering Chemistry Research, 2012, 51, 7800-7815. | 1.8 | 20 |
| 281 | Synthesis of Interplant Water-Allocation and Heat-Exchange Networks. Part 2: Integrations between Fixed Flow Rate and Fixed Contaminant-Load Processes. Industrial & Engineering Chemistry Research, 2012, 51, 14793-14805. | 1.8 | 23 |
| 282 | Simultaneous Optimization and Heat Integration for Biodiesel Production from Cooking Oil and Algae. Industrial & Engineering Chemistry Research, 2012, 51, 7998-8014. | 1.8 | 108 |
| 283 | Generalized Disjunctive Programming as a Systematic Modeling Framework to Derive Scheduling Formulations. Industrial & Engineering Chemistry Research, 2012, 51, 5781-5792. | 1.8 | 72 |
| 284 | Modeling and Computational Strategies for Optimal Development Planning of Offshore Oilfields under Complex Fiscal Rules. Industrial & Engineering Chemistry Research, 2012, 51, 14438-14460. | 1.8 | 14 |
| 285 | A Mixed-Integer Linear Programming Model for Optimizing the Scheduling and Assignment of Tank Farm Operations. Industrial & Engineering Chemistry Research, 2012, 51, 6441-6454. | 1.8 | 12 |
| 286 | From time representation in scheduling to the solution of strip packing problems. Computers and Chemical Engineering, 2012, 44, 45-57. | 2.0 | 8 |
| 287 | A comparative study of continuous-time models for scheduling of crude oil operations in inland refineries. Computers and Chemical Engineering, 2012, 44, 141-167. | 2.0 | 41 |
| 288 | Refinery Production Planning: Multiperiod MINLP with Nonlinear CDU Model. Industrial & Engineering Chemistry Research, 2012, 51, 12852-12861. | 1.8 | 30 |

| # | Article | IF | Citations |
|---|---|---|---|
| 289 | Advances in mathematical programming models for enterprise-wide optimization. Computers and Chemical Engineering, 2012, 47, 2-18. | 2.0 | 167 |
| 290 | Generalized Disjunctive Programming: A Framework for Formulation and Alternative Algorithms for MINLP Optimization. The IMA Volumes in Mathematics and Its Applications, 2012, , 93-115. | 0.5 | 37 |
| 291 | BIOpt. Computer Aided Chemical Engineering, 2012, 30, 16-20. | 0.3 | 7 |
| 292 | Synthesis of Interplant Water-Allocation and Heat-Exchange Networks. Part 1: Fixed Flow Rate Processes. Industrial & Engineering Chemistry Research, 2012, 51, 4299-4312. | 1.8 | 24 |
| 293 | A Novel Global Optimization Approach to the Multiperiod Blending Problem. Computer Aided Chemical Engineering, 2012, , 1492-1496. | 0.3 | 4 |
| 294 | Integration of strategic and operational decision-making for continuous power-intensive processes. Computer Aided Chemical Engineering, 2012, 30, 232-236. | 0.3 | 1 |
| 295 | An Efficient Multiperiod MINLP Model for Optimal Planning of Offshore Oil and Gas Field Infrastructure. Industrial & Engineering Chemistry Research, 2012, 51, 6823-6840. | 1.8 | 89 |
| 296 | A framework for synthesizing the optimal separation process of azeotropic mixtures. AICHE Journal, 2012, 58, 1487-1502. | 1.8 | 13 |
| 297 | Energy optimization of bioethanol production via hydrolysis of switchgrass. AICHE Journal, 2012, 58, 1538-1549. | 1.8 | 70 |
| 298 | Optimal design of complex distillation system for multicomponent zeotropic separations. Chemical Engineering Science, 2012, 75, 133-143. | 1.9 | 14 |
| 299 | Strategies for the robust simulation of thermally coupled distillation sequences. Computers and Chemical Engineering, 2012, 36, 149-159. | 2.0 | 34 |
| 300 | Optimal production planning under time-sensitive electricity prices for continuous power-intensive processes. Computers and Chemical Engineering, 2012, 38, 171-184. | 2.0 | 222 |
| 301 | An efficient method for optimal design of large-scale integrated chemical production sites with endogenous uncertainty. Computers and Chemical Engineering, 2012, 37, 89-103. | 2.0 | 11 |
| 302 | A hierarchy of relaxations for linear generalized disjunctive programming. European Journal of Operational Research, 2012, 216, 70-82. | 3.5 | 28 |
| 303 | A hierarchy of relaxations for nonlinear convex generalized disjunctive programming. European Journal of Operational Research, 2012, 218, 38-47. | 3.5 | 34 |
| 304 | Modeling multistream heat exchangers with and without phase changes for simultaneous optimization and heat integration. AICHE Journal, 2012, 58, 190-204. | 1.8 | 80 |
| 305 | Generalized Disjunctive Programming: Solution Strategies. Applied Optimization, 2012, , 57-75. | 0.4 | 0 |
| 306 | Incorporating Complex Fiscal Rules in Strategic Planning of Offshore Oil and Gas Fields. Computer Aided Chemical Engineering, 2012, 31, 1467-1471. | 0.3 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 307 | Computational Strategies for Multistage Mixed-Integer Linear Stochastic Programs with Endogenous Uncertainty. , 2012, , . | | 0 |
| 308 | Heat Integration in non-Isothermal Systems Using an Alternative Disjunctive Optimization Model. Computer Aided Chemical Engineering, 2012, , 1282-1286. | 0.3 | 0 |
| 309 | Optimization of Water Consumption in Second Generation Bioethanol Plants. Industrial & Engineering Chemistry Research, 2011, 50, 3705-3721. | 1.8 | 44 |
| 310 | 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. | 1.8 | 47 |
| 311 | SynFlex. Computer Aided Chemical Engineering, 2011, 29, 1924-1928. | 0.3 | 3 |
| 312 | Optimal Distribution-Inventory Planning of Industrial Gases. I. Fast Computational Strategies for Large-Scale Problems. Industrial & Engineering Chemistry Research, 2011, 50, 2910-2927. | 1.8 | 34 |
| 313 | Optimal Distribution-Inventory Planning of Industrial Gases. II. MINLP Models and Algorithms for Stochastic Cases. Industrial & Engineering Chemistry Research, 2011, 50, 2928-2945. | 1.8 | 44 |
| 314 | Integration of Nonlinear Crude Distillation Unit Models in Refinery Planning Optimization. Industrial & Engineering Chemistry Research, 2011, 50, 6860-6870. | 1.8 | 66 |
| 315 | Process Optimization of FT-Diesel Production from Lignocellulosic Switchgrass. Industrial & Engineering Chemistry Research, 2011, 50, 13485-13499. | 1.8 | 92 |
| 316 | Energy, Water and Process Technologies Integration for the Simultaneous Production of Ethanol and Food from the entire Corn Plant. Computer Aided Chemical Engineering, 2011, , 2004-2008. | 0.3 | 9 |
| 317 | Ice Cream Scheduling. Computer Aided Chemical Engineering, 2011, 29, 915-919. | 0.3 | 0 |
| 318 | Solution strategies for multistage stochastic programming with endogenous uncertainties. Computers and Chemical Engineering, 2011, 35, 2235-2247. | 2.0 | 51 |
| 319 | Temporal and spatial Lagrangean decompositions in multi-site, multi-period production planning problems with sequence-dependent changeovers. Computers and Chemical Engineering, 2011, 35, 2913-2928. | 2.0 | 28 |
| 320 | Using redundancy to strengthen the relaxation for the global optimization of MINLP problems. Computers and Chemical Engineering, 2011, 35, 2729-2740. | 2.0 | 24 |
| 321 | A new Lagrangian decomposition approach applied to the integration of refinery planning and crude-oil scheduling. Computers and Chemical Engineering, 2011, 35, 2750-2766. | 2.0 | 76 |
| 322 | A multiscale decomposition method for the optimal planning and scheduling of multi-site continuous multiproduct plants. Chemical Engineering Science, 2011, 66, 4307-4318. | 1.9 | 53 |
| 323 | A multiperiod planning model for gas production system. Journal of Petroleum Science and Engineering, 2011, 77, 226-235. | 2.1 | 11 |
| 324 | Exploiting vector space properties to strengthen the relaxation of bilinear programs arising in the global optimization of process networks. Optimization Letters, 2011, 5, 1-11. | 0.9 | 19 |

| # | Article | IF | Citations |
|---|---|---|---|
| 325 | Balancing responsiveness and economics in process supply chain design with multiâ€echelon stochastic inventory. AICHE Journal, 2011, 57, 178-192. | 1.8 | 42 |
| 326 | Greedy algorithm for scheduling batch plants with sequenceâ€dependent changeovers. AICHE Journal, 2011, 57, 373-387. | 1.8 | 27 |
| 327 | Global superstructure optimization for the design of integrated process water networks. AICHE Journal, 2011, 57, 434-457. | 1.8 | 165 |
| 328 | Stochastic inventory management for tactical process planning under uncertainties: MINLP models and algorithms. AICHE Journal, 2011, 57, 1250-1277. | 1.8 | 92 |
| 329 | Energy optimization of bioethanol production via gasification of switchgrass. AICHE Journal, 2011, 57, 3408-3428. | 1.8 | 138 |
| 330 | Optimal scheduling of continuous plants with energy constraints. Computers and Chemical Engineering, 2011, 35, 372-387. | 2.0 | 62 |
| 331 | Long-term scheduling of a single-unit multi-product continuous process to manufacture high performance glass. Computers and Chemical Engineering, 2011, 35, 554-574. | 2.0 | 39 |
| 332 | Time representations and mathematical models for process scheduling problems. Computers and Chemical Engineering, 2011, 35, 1038-1063. | 2.0 | 65 |
| 333 | Separation network design with mass and energy separating agents. Computers and Chemical Engineering, 2011, 35, 2005-2016. | 2.0 | 10 |
| 334 | Energy, water and process technologies integration for the simultaneous production of ethanol and food from the entire corn plant. Computers and Chemical Engineering, 2011, 35, 1547-1557. | 2.0 | 69 |
| 335 | Energy optimization of hydrogen production from lignocellulosic biomass. Computers and Chemical Engineering, 2011, 35, 1798-1806. | 2.0 | 50 |
| 336 | A bilevel decomposition algorithm for simultaneous production scheduling and conflict-free routing for automated guided vehicles. Computers and Operations Research, 2011, 38, 876-888. | 2.4 | 93 |
| 337 | Optimization of lignocellulosic based diesel. Computer Aided Chemical Engineering, 2011, 29, 1698-1702. | 0.3 | 0 |
| 338 | Integrated multiâ€echelon supply chain design with inventories under uncertainty: MINLP models, computational strategies. AICHE Journal, 2010, 56, 419-440. | 1.8 | 41 |
| 339 | A biâ€criterion optimization approach for the design and planning of hydrogen supply chains for vehicle use. AICHE Journal, 2010, 56, 650-667. | 1.8 | 43 |
| 340 | A rigorous comparative study of temporal versus spatial Lagrangean decomposition in production planning problems. Computer Aided Chemical Engineering, 2010, 28, 1225-1230. | 0.3 | 0 |
| 341 | Energy and Water Optimization in Biofuel Plants. Chinese Journal of Chemical Engineering, 2010, 18, 914-922. | 1.7 | 60 |
| 342 | Issues and trends in the teaching of process and product design. AICHE Journal, 2010, 56, 1120-1125. | 1.8 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 343 | A global optimization strategy for the environmentally conscious design of chemical supply chains under uncertainty in the damage assessment model. Computers and Chemical Engineering, 2010, 34, 42-58. | 2.0 | 136 |
| 344 | A simple heuristic for reducing the number of scenarios in two-stage stochastic programming. Computers and Chemical Engineering, 2010, 34, 1246-1255. | 2.0 | 75 |
| 345 | Strengthening of lower bounds in the global optimization of Bilinear and Concave Generalized Disjunctive Programs. Computers and Chemical Engineering, 2010, 34, 914-930. | 2.0 | 20 |
| 346 | Scope for the application of mathematical programming techniques in the synthesis and planning of sustainable processes. Computers and Chemical Engineering, 2010, 34, 1365-1376. | 2.0 | 224 |
| 347 | Aggregate models based on improved group methods for simulation and optimization of distillation systems. Computers and Chemical Engineering, 2010, 34, 1312-1319. | 2.0 | 29 |
| 348 | Optimal design of reliable integrated chemical production sites. Computers and Chemical Engineering, 2010, 34, 1919-1936. | 2.0 | 23 |
| 349 | An equation-oriented approach for handling thermodynamics based on cubic equation of state in process optimization. Computers and Chemical Engineering, 2010, 34, 2085-2096. | 2.0 | 78 |
| 350 | Superstructure optimization of Lignocellulosic Bioethanol plants. Computer Aided Chemical Engineering, 2010, , 943-948. | 0.3 | 11 |
| 351 | Hybrid Simulation-Optimization Algorithms for Distillation Design. Computer Aided Chemical Engineering, 2010, , 637-642. | 0.3 | 4 |
| 352 | Optimization of Energy and Water Consumption in Corn-Based Ethanol Plants. Industrial & Engineering Chemistry Research, 2010, 49, 7972-7982. | 1.8 | 103 |
| 353 | Strategic Capacity Allocation under Uncertainty by Using a Two-Stage Stochastic Decomposition Algorithm with Incumbent Solutions. Industrial & Engineering Chemistry Research, 2010, 49, 2812-2821. | 1.8 | 4 |
| 354 | Automating Mathematical Program Transformations. Lecture Notes in Computer Science, 2010, , 134-148. | 1.0 | 14 |
| 355 | Research Challenges in Planning and Scheduling for Enterprise-Wide Optimization of Process Industries. Computer Aided Chemical Engineering, 2009, , 15-21. | 0.3 | 7 |
| 356 | Optimal design and planning of sustainable chemical supply chains under uncertainty. AICHE Journal, 2009, 55, 99-121. | 1.8 | 254 |
| 357 | Optimal synthesis of pâ€xylene separation processes based on crystallization technology. AICHE Journal, 2009, 55, 354-373. | 1.8 | 29 |
| 358 | Risk management for a global supply chain planning under uncertainty: Models and algorithms. AICHE Journal, 2009, 55, 931-946. | 1.8 | 183 |
| 359 | Linear coupled component automata for MILP modeling of hybrid systems. Computers and Chemical Engineering, 2009, 33, 162-175. | 2.0 | 7 |
| 360 | 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. | 2.0 | 92 |

| # | Article | IF | Citations |
|---|---|---|---|
| 361 | Petroleum allocation at PETROBRAS: Mathematical model and a solution algorithm. Computers and Chemical Engineering, 2009, 33, 2123-2133. | 2.0 | 35 |
| 362 | Optimal Short-Term Scheduling of Large-Scale Multistage Batch Plants. Industrial & Engineering Chemistry Research, 2009, 48, 11002-11016. | 1.8 | 45 |
| 363 | A Novel Priority-Slot Based Continuous-Time Formulation for Crude-Oil Scheduling Problems. Industrial & Engineering Chemistry Research, 2009, 48, 8515-8528. | 1.8 | 93 |
| 364 | Stochastic Programming Approach for the Planning of Offshore Oil or Gas Field Infrastructure under Decision-Dependent Uncertainty. Industrial & Engineering Chemistry Research, 2009, 48, 3078-3097. | 1.8 | 103 |
| 365 | New Continuous-Time Scheduling Formulation for Continuous Plants under Variable Electricity Cost. Industrial & Engineering Chemistry Research, 2009, 48, 6701-6714. | 1.8 | 97 |
| 366 | Synthesis and Optimization of an Ammoniaâ^'Water Absorption Refrigeration Cycle Considering Different Types of Heat Exchangers by Application of Mixed-Integer Nonlinear Programming. Industrial & Engineering Chemistry Research, 2009, 48, 2972-2990. | 1.8 | 18 |
| 367 | Global Optimization of Nonconvex Generalized Disjunctive Programs. Computer Aided Chemical Engineering, 2009, , 879-884. | 0.3 | 0 |
| 368 | An Approach to the Representation of Gradual Uncertainty Resolution in Stochastic Multiperiod Planning. Computer Aided Chemical Engineering, 2009, , 713-718. | 0.3 | 0 |
| 369 | Challenges in Enterprise Wide Optimization for the Process Industries. Springer Optimization and Its Applications, 2009, , 3-59. | 0.6 | 9 |
| 370 | Tightening the Linear Relaxation of a Mixed Integer Nonlinear Program Using Constraint Programming. Lecture Notes in Computer Science, 2009, , 208-222. | 1.0 | 5 |
| 371 | Scope for the Application of Mathematical Programming Techniques in the Synthesis and Planning of Sustainable Processes. , 2009, , 55-76. | | 0 |
| 372 | A Lagrangean based branch-and-cut algorithm for global optimization of nonconvex mixed-integer nonlinear programs with decomposable structures. Journal of Global Optimization, 2008, 41, 163-186. | 1.1 | 31 |
| 373 | Simultaneous batching and scheduling of single stage batch plants with parallel units. AICHE Journal, 2008, 54, 183-193. | 1.8 | 39 |
| 374 | Energy optimization for the design of cornâ€based ethanol plants. AICHE Journal, 2008, 54, 1499-1525. | 1.8 | 153 |
| 375 | An algorithm for the use of surrogate models in modular flowsheet optimization. AICHE Journal, 2008, 54, 2633-2650. | 1.8 | 226 |
| 376 | An algorithmic framework for convex mixed integer nonlinear programs. Discrete Optimization, 2008, 5, 186-204. | 0.6 | 622 |
| 377 | A multistage stochastic programming approach with strategies for uncertainty reduction in the synthesis of process networks with uncertain yields. Computers and Chemical Engineering, 2008, 32, 766-788. | 2.0 | 56 |
| 378 | Global optimization of multiscenario mixed integer nonlinear programming models arising in the synthesis of integrated water networks under uncertainty. Computers and Chemical Engineering, 2008, 32, 145-160. | 2.0 | 107 |

| # | Article | IF | Citations |
|---|---|---|---|
| 379 | An improved piecewise outer-approximation algorithm for the global optimization of MINLP models involving concave and bilinear terms. Computers and Chemical Engineering, 2008, 32, 477-493. | 2.0 | 97 |
| 380 | Simultaneous planning and scheduling of single-stage multi-product continuous plants with parallel lines. Computers and Chemical Engineering, 2008, 32, 2664-2683. | 2.0 | 78 |
| 381 | Optimal synthesis of heat exchanger networks involving isothermal process streams. Computers and Chemical Engineering, 2008, 32, 1918-1942. | 2.0 | 100 |
| 382 | Global optimization for scheduling refinery crude oil operations. Computers and Chemical Engineering, 2008, 32, 2745-2766. | 2.0 | 105 |
| 383 | Design of responsive supply chains under demand uncertainty. Computers and Chemical Engineering, 2008, 32, 3090-3111. | 2.0 | 200 |
| 384 | Simultaneous Retrofit and Heat Integration of Chemical Processes. Industrial & Engineering Chemistry Research, 2008, 47, 5512-5528. | 1.8 | 41 |
| 385 | Multi-operations time-slots model for crude-oil operations scheduling. Computer Aided Chemical Engineering, 2008, , 593-598. | 0.3 | 3 |
| 386 | Lagrangean heuristic for the scheduling and control of polymerization reactors. AICHE Journal, 2008, 54, 163-182. | 1.8 | 44 |
| 387 | 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. | 1.8 | 116 |
| 388 | Slot-Based Formulation for the Short-Term Scheduling of Multistage, Multiproduct Batch Plants with Sequence-Dependent Changeovers. Industrial & Engineering Chemistry Research, 2008, 47, 1159-1183. | 1.8 | 36 |
| 389 | Short-Term Scheduling of Batch Plants with Parallel Reactors Forming Mobile Workgroups. Industrial & Engineering Chemistry Research, 2008, 47, 6070-6080. | 1.8 | 0 |
| 390 | Overview of Planning and Scheduling for Enterprise-wide Optimization of Process Industries | | |

| # | Article | IF | Citations |
|---|---|---|---|
| 397 | Computational implementation of non-linear convex hull reformulation. Computers and Chemical Engineering, 2007, 31, 856-866. | 2.0 | 17 |
| 398 | Simultaneous Cyclic Scheduling and Control of a Multiproduct CSTR. Industrial & Engineering Chemistry Research, 2006, 45, 6698-6712. | 1.8 | 144 |
| 399 | Two New Continuous-Time Models for the Scheduling of Multistage Batch Plants with Sequence Dependent Changeovers. Industrial & Engineering Chemistry Research, 2006, 45, 6210-6226. | 1.8 | 78 |
| 400 | Structural Considerations and Modeling in the Synthesis of Heat-Integratedâ^'Thermally Coupled Distillation Sequences. Industrial & Engineering Chemistry Research, 2006, 45, 8454-8474. | 1.8 | 94 |
| 401 | A Decomposition Method for the Simultaneous Planning and Scheduling of Single-Stage Continuous Multiproduct Plants. Industrial & Engineering Chemistry Research, 2006, 45, 299-315. | 1.8 | 120 |
| 402 | Modeling of Purchase and Sales Contracts in Supply Chain Optimization. Industrial & Engineering Chemistry Research, 2006, 45, 5013-5026. | 1.8 | 36 |
| 403 | A simultaneous optimization approach for off-line blending and scheduling of oil-refinery operations. Computers and Chemical Engineering, 2006, 30, 614-634. | 2.0 | 159 |
| 404 | Global optimization for the synthesis of integrated water systems in chemical processes. Computers and Chemical Engineering, 2006, 30, 650-673. | 2.0 | 357 |
| 405 | An efficient MILP model for the short-term scheduling of single stage batch plants. Computers and Chemical Engineering, 2006, 30, 1003-1018. | 2.0 | 53 |
| 406 | A novel branch and bound algorithm for optimal development of gas fields under uncertainty in reserves. Computers and Chemical Engineering, 2006, 30, 1076-1092. | 2.0 | 64 |
| 407 | State-of-the-art review of optimization methods for short-term scheduling of batch processes. Computers and Chemical Engineering, 2006, 30, 913-946. | 2.0 | 675 |
| 408 | A Class of stochastic programs with decision dependent uncertainty. Mathematical Programming, 2006, 108, 355-394. | 1.6 | 168 |
| 409 | On the relation of continuous- and discrete-time state-task network formulations. AICHE Journal, 2006, 52, 843-849. | 1.8 | 21 |
| 410 | A multistage stochastic programming approach with strategies for uncertainty reduction in the synthesis of process networks with uncertain yields. Computer Aided Chemical Engineering, 2006, , 1937-1942. | 0.3 | 2 |
| 411 | Global optimization of multiscenario mixed integer nonlinear programming models arising in the synthesis of integrated water networks under uncertainty. Computer Aided Chemical Engineering, 2006, 21, 1747-1752. | 0.3 | 12 |
| 412 | Advances in Logic-Based Optimization Approaches to Process Integration and Supply Chain Management. , 2005, , 299-322. | | 5 |
| 413 | MINLP model for synthesis of paraxylene separation processes based on crystallization technology. Computer Aided Chemical Engineering, 2005, , 829-834. | 0.3 | 1 |
| 414 | Optimal synthesis of distillation columns: Integration of process simulators in a disjunctive programming environment. Computer Aided Chemical Engineering, 2005, , 715-720. | 0.3 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 415 | A lagrangean duality based branch and bound for solving linear stochastic programs with decision dependent uncertainty. Computer Aided Chemical Engineering, 2005, 20, 55-60. | 0.3 | 5 |
| 416 | Optimal synthesis of complex distillation columns using rigorous models. Computers and Chemical Engineering, 2005, 29, 1203-1215. | 2.0 | 76 |
| 417 | Logic-based outer approximation for globally optimal synthesis of process networks. Computers and Chemical Engineering, 2005, 29, 1914-1933. | 2.0 | 87 |
| 418 | A cutting plane method for solving linear generalized disjunctive programming problems. Computers and Chemical Engineering, 2005, 29, 1891-1913. | 2.0 | 57 |
| 419 | New Continuous-Time MILP Model for the Short-Term Scheduling of Multistage Batch Plants. Industrial & Engineering Chemistry Research, 2005, 44, 9175-9190. | 1.8 | 88 |
| 420 | Optimal production and scheduling of a process with decaying catalyst. AICHE Journal, 2005, 51, 909-921. | 1.8 | 3 |
| 421 | Enterprise-wide optimization: A new frontier in process systems engineering. AICHE Journal, 2005, 51, 1846-1857. | 1.8 | 441 |
| 422 | Logic-Based Modeling and Solution of Nonlinear Discrete/Continuous Optimization Problems. Annals of Operations Research, 2005, 139, 267-288. | 2.6 | 22 |
| 423 | Rigorous Design of Distillation Columns:â€‰ Integration of Disjunctive Programming and Process Simulators. Industrial & Engineering Chemistry Research, 2005, 44, 6760-6775. | 1.8 | 59 |
| 424 | A stochastic programming approach to planning of offshore gas field developments under uncertainty in reserves. Computers and Chemical Engineering, 2004, 28, 1409-1429. | 2.0 | 181 |
| 425 | Retrospective on optimization. Computers and Chemical Engineering, 2004, 28, 1169-1192. | 2.0 | 475 |
| 426 | Part II. Future perspective on optimization. Computers and Chemical Engineering, 2004, 28, 1193-1218. | 2.0 | 150 |
| 427 | A decomposition method for synthesizing complex column configurations using tray-by-tray GDP models. Computers and Chemical Engineering, 2004, 28, 2165-2188. | 2.0 | 43 |
| 428 | A hybrid MILP/CP decomposition approach for the continuous time scheduling of multipurpose batch plants. Computers and Chemical Engineering, 2004, 28, 1921-1949. | 2.0 | 127 |
| 429 | Design of distillation sequences: from conventional to fully thermally coupled distillation systems. Computers and Chemical Engineering, 2004, 28, 2307-2329. | 2.0 | 138 |
| 430 | Challenges in the new millennium: product discovery and design, enterprise and supply chain optimization, global life cycle assessment. Computers and Chemical Engineering, 2004, 29, 29-39. | 2.0 | 165 |
| 431 | Approximation to Multistage Stochastic Optimization in Multiperiod Batch Plant Scheduling under Demand Uncertainty. Industrial & Engineering Chemistry Research, 2004, 43, 3695-3713. | 1.8 | 113 |
| 432 | Optimal synthesis of complex distillation columns using rigorous models. Computer Aided Chemical Engineering, 2004, , 53-74. | 0.3 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 433 | Generalized Convex Disjunctive Programming: Nonlinear Convex Hull Relaxation. Computational Optimization and Applications, 2003, 26, 83-100. | 0.9 | 121 |
| 434 | Mathematical Programming Model for Heat-Exchanger Network Synthesis Including Detailed Heat-Exchanger Designs. 2. Network Synthesis. Industrial & Engineering Chemistry Research, 2003, 42, 4019-4027. | 1.8 | 60 |
| 435 | Thermodynamically equivalent configurations for thermally coupled distillation. AICHE Journal, 2003, 49, 2864-2884. | 1.8 | 40 |
| 436 | Alternative representations and formulations for the economic optimization of multicomponent distillation columns. Computers and Chemical Engineering, 2003, 27, 363-383. | 2.0 | 41 |
| 437 | Modeling of discrete/continuous optimization problems: characterization and formulation of disjunctions and their relaxations. Computers and Chemical Engineering, 2003, 27, 433-448. | 2.0 | 132 |
| 438 | Scheduling optimization under uncertaintyâ€"an alternative approach. Computers and Chemical Engineering, 2003, 27, 469-490. | 2.0 | 97 |
| 439 | A model predictive control strategy for supply chain optimization. Computers and Chemical Engineering, 2003, 27, 1201-1218. | 2.0 | 265 |
| 440 | Global optimization of nonlinear generalized disjunctive programming with bilinear equality constraints: applications to process networks. Computers and Chemical Engineering, 2003, 27, 1557-1575. | 2.0 | 89 |
| 441 | A strategy for the integration of production planning and reactive scheduling in the optimization of a hydrogen supply network. Computers and Chemical Engineering, 2003, 27, 1813-1839. | 2.0 | 101 |
| 442 | New General Continuous-Time Stateâ^'Task Network Formulation for Short-Term Scheduling of Multipurpose Batch Plants. Industrial & Engineering Chemistry Research, 2003, 42, 3056-3074. | 1.8 | 250 |
| 443 | Minimization of the Makespan with a Discrete-Time Stateâ^'Task Network Formulation. Industrial & Engineering Chemistry Research, 2003, 42, 6252-6257. | 1.8 | 51 |
| 444 | Superstructure optimization of the olefin separation process. Computer Aided Chemical Engineering, 2003, 14, 191-196. | 0.3 | 12 |
| 445 | Temporal Decomposition Scheme for Nonlinear Multisite Production Planning and Distribution Models. Industrial & Engineering Chemistry Research, 2003, 42, 3045-3055. | 1.8 | 96 |
| 446 | Challenges in the new millennium: Product discovery and design, enterprise and supply chain optimization, global life cycle assessment. Computer Aided Chemical Engineering, 2003, 15, 28-47. | 0.3 | 8 |
| 447 | A cutting plane method for solving linear generalized disjunctive programming problems. Computer Aided Chemical Engineering, 2003, 15, 1032-1037. | 0.3 | 1 |
| 448 | A new continuous-time state task network formulation for short term scheduling of multipurpose batch plants. Computer Aided Chemical Engineering, 2003, 14, 215-220. | 0.3 | 6 |
| 449 | Scheduling multistage flowshops with parallel unitsâ€"An alternative approach to optimization under uncertainty. Computer Aided Chemical Engineering, 2003, 15, 154-159. | 0.3 | 0 |
| 450 | High-Level Optimization Model for the Retrofit Planning of Process Networks. Industrial & Engineering Chemistry Research, 2002, 41, 3762-3770. | 1.8 | 22 |

| # | Article | IF | Citations |
|---|---|---|---|
| 451 | A novel branch and bound algorithm for scheduling flowshop plants with uncertain processing times. Computers and Chemical Engineering, 2002, 26, 41-57. | 2.0 | 80 |
| 452 | Decomposition techniques for multistage scheduling problems using mixed-integer and constraint programming methods. Computers and Chemical Engineering, 2002, 26, 1533-1552. | 2.0 | 183 |
| 453 | Review of Nonlinear Mixed-Integer and Disjunctive Programming Techniques. Optimization and Engineering, 2002, 3, 227-252. | 1.3 | 444 |
| 454 | Dynamic Modeling and Decentralized Control of Supply Chains. Industrial & Engineering Chemistry Research, 2001, 40, 3369-3383. | 1.8 | 71 |
| 455 | Simultaneous Planning for New Product Development and Batch Manufacturing Facilities. Industrial & Engineering Chemistry Research, 2001, 40, 6147-6164. | 1.8 | 86 |
| 456 | Generalized Disjunctive Programming Model for the Optimal Synthesis of Thermally Linked Distillation Columns. Industrial & Engineering Chemistry Research, 2001, 40, 2260-2274. | 1.8 | 100 |
| 457 | Integration of thermodynamic insights and MINLP optimization for the synthesis, design and analysis of process flowsheets. Computers and Chemical Engineering, 2001, 25, 73-83. | 2.0 | 45 |
| 458 | A decomposition approach for the scheduling of a steel plant production. Computers and Chemical Engineering, 2001, 25, 1647-1660. | 2.0 | 175 |
| 459 | A disjunctive programming approach for the optimal design of reactive distillation columns. Computers and Chemical Engineering, 2001, 25, 1661-1673. | 2.0 | 101 |
| 460 | A global optimization algorithm for nonconvex generalized disjunctive programming and applications to process systems. Computers and Chemical Engineering, 2001, 25, 1675-1697. | 2.0 | 73 |
| 461 | Disjunctive optimization design models for complex liquidâ€“liquid multistage extractors. AICHE Journal, 2001, 47, 2243-2252. | 1.8 | 13 |
| 462 | A Lagrangean Decomposition Heuristic for the Design and Planning of Offshore Hydrocarbon Field Infrastructures with Complex Economic Objectives. Industrial & Engineering Chemistry Research, 2001, 40, 2857-2875. | 1.8 | 87 |
| 463 | Algorithms for Hybrid MILP/CP Models for a Class of Optimization Problems. INFORMS Journal on Computing, 2001, 13, 258-276. | 1.0 | 332 |
| 464 | Scheduling to minimize expected completion time in flowshop plants with uncertain processing times. Computer Aided Chemical Engineering, 2000, 8, 79-84. | 0.3 | 5 |
| 465 | Research challenges in process systems engineering. AICHE Journal, 2000, 46, 1700-1703. | 1.8 | 235 |
| 466 | Integrating complex economic objectives with the design and planning of offshore oilfield infrastructures. Computers and Chemical Engineering, 2000, 24, 1049-1055. | 2.0 | 51 |
| 467 | New algorithms for nonlinear generalized disjunctive programming. Computers and Chemical Engineering, 2000, 24, 2125-2141. | 2.0 | 207 |
| 468 | Modeling issues and implementation of language for disjunctive programming. Computers and Chemical Engineering, 2000, 24, 2143-2155. | 2.0 | 50 |

| # | Article | IF | Citations |
|---|---|---|---|
| 469 | The exact overall time distribution of a project with uncertain task durations. European Journal of Operational Research, 2000, 126, 614-636. | 3.5 | 40 |
| 470 | Title is missing!. Optimization and Engineering, 2000, 1, 215-231. | 1.3 | 8 |
| 471 | Optimal Design of Complex Distillation Columns Using Rigorous Tray-by-Tray Disjunctive Programming Models. Industrial & Engineering Chemistry Research, 2000, 39, 4326-4335. | 1.8 | 113 |
| 472 | An Iterative Aggregation/Disaggregation Approach for the Solution of a Mixed-Integer Nonlinear Oilfield Infrastructure Planning Model. Industrial & Engineering Chemistry Research, 2000, 39, 1955-1971. | 1.8 | 89 |
| 473 | Disjunctive Programming Models for the Optimal Design of Distillation Columns and Separation Sequencesâ€. Industrial & Engineering Chemistry Research, 2000, 39, 1637-1648. | 1.8 | 111 |
| 474 | Supply Chain Optimization in Continuous Flexible Process Networks. Industrial & Engineering Chemistry Research, 2000, 39, 1279-1290. | 1.8 | 92 |
| 475 | logmip: a disjunctive 0â€“1 non-linear optimizer for process system models. Computers and Chemical Engineering, 1999, 23, 555-565. | 2.0 | 63 |
| 476 | A systematic modeling framework of superstructure optimization in process synthesis. Computers and Chemical Engineering, 1999, 23, 709-731. | 2.0 | 266 |
| 477 | Disjunctive multiperiod optimization methods for design and planning of chemical process systems. Computers and Chemical Engineering, 1999, 23, 1075-1095. | 2.0 | 53 |
| 478 | Nonlinear disjunctive programming models for the synthesis of heat integrated distillation sequences. Computers and Chemical Engineering, 1999, 23, 1135-1151. | 2.0 | 49 |
| 479 | Title is missing!. Journal of Global Optimization, 1999, 14, 217-249. | 1.1 | 124 |
| 480 | Mathematical programming approaches to the synthesis of chemical process systems. Korean Journal of Chemical Engineering, 1999, 16, 407-426. | 1.2 | 128 |
| 481 | Aggregated Models for Integrated Distillation Systems. Industrial & Engineering Chemistry Research, 1999, 38, 2330-2344. | 1.8 | 46 |
| 482 | Resource-Constrained Scheduling of Tests in New Product Development. Industrial & Engineering Chemistry Research, 1999, 38, 3013-3026. | 1.8 | 78 |
| 483 | Assignment and sequencing models for thescheduling of process systems. Annals of Operations Research, 1998, 81, 433-466. | 2.6 | 157 |
| 484 | A Rigorous MINLP Model for the Optimal Synthesis and Operation of Utility Plants. Chemical Engineering Research and Design, 1998, 76, 246-258. | 2.7 | 142 |
| 485 | Cyclic scheduling of continuous parallel-process units with decaying performance. AICHE Journal, 1998, 44, 1623-1636. | 1.8 | 107 |
| 486 | A global MINLP optimization algorithm for the synthesis of heat exchanger networks with no stream splits. Computers and Chemical Engineering, 1998, 22, 367-384. | 2.0 | 148 |

| # | Article | IF | Citations |
|---|---|---|---|
| 487 | Structural flowsheet optimization with complex investment cost functions. Computers and Chemical Engineering, 1998, 22, 673-686. | 2.0 | 25 |
| 488 | Synthesis and operational planning of utility systems for multiperiod operation. Computers and Chemical Engineering, 1998, 22, 979-993. | 2.0 | 116 |
| 489 | Integration of hierarchical decomposition and mathematical programming for the synthesis of process flowsheets. Computers and Chemical Engineering, 1998, 22, 147-175. | 2.0 | 53 |
| 490 | Tight mixed-integer optimization models for the solution of linear and nonlinear systems of disjunctive equations. Computers and Chemical Engineering, 1998, 22, 1229-1239. | 2.0 | 9 |
| 491 | A rigorous disjunctive optimization model for simultaneous flowsheet optimization and heat integration. Computers and Chemical Engineering, 1998, 22, S157-S164. | 2.0 | 76 |
| 492 | Continuous global optimization of structured process systems models. Computers and Chemical Engineering, 1998, 22, 1749-1770. | 2.0 | 58 |
| 493 | Optimal Design of Distributed Wastewater Treatment Networks. Industrial & Engineering Chemistry Research, 1998, 37, 4036-4048. | 1.8 | 184 |
| 494 | A Bilevel Decomposition Algorithm for Long-Range Planning of Process Networks. Industrial & Engineering Chemistry Research, 1998, 37, 474-481. | 1.8 | 123 |
| 495 | Optimal Planning and Scheduling of Offshore Oil Field Infrastructure Investment and Operations. Industrial & Engineering Chemistry Research, 1998, 37, 1380-1397. | 1.8 | 152 |
| 496 | A Mixed-Integer Linear Programming Model for Short-Term Scheduling of Single-Stage Multiproduct Batch Plants with Parallel Lines. Industrial & Engineering Chemistry Research, 1997, 36, 1695-1707. | 1.8 | 122 |
| 497 | A disaggregation algorithm for the optimization of stochastic planning models. Computers and Chemical Engineering, 1997, 21, 751-774. | 2.0 | 89 |
| 498 | Optimal multiperiod operational planning for utility systems. Computers and Chemical Engineering, 1997, 21, 787-800. | 2.0 | 94 |
| 499 | A logic-based approach to scheduling problems with resource constraints. Computers and Chemical Engineering, 1997, 21, 801-818. | 2.0 | 58 |
| 500 | An Alternate MILP Model for Short-Term Scheduling of Batch Plants with Preordering Constraints. Industrial & Engineering Chemistry Research, 1996, 35, 338-342. | 1.8 | 61 |
| 501 | A Computational Approach for the Modeling/Decomposition Strategy in the MINLP Optimization of Process Flowsheets with Implicit Models. Industrial & Engineering Chemistry Research, 1996, 35, 2065-2070. | 1.8 | 21 |
| 502 | Mixed-Integer Linear Programming Model for Refinery Short-Term Scheduling of Crude Oil Unloading with Inventory Management. Industrial & Engineering Chemistry Research, 1996, 35, 1630-1641. | 1.8 | 299 |
| 503 | Optimization Models for the Scheduling of Testing Tasks in New Product Development. Industrial & Engineering Chemistry Research, 1996, 35, 3498-3510. | 1.8 | 85 |
| 504 | Disjunctive Programming Techniques for the Optimization of Process Systems with Discontinuous Investment Costsâ˜Multiple Size Regions. Industrial & Engineering Chemistry Research, 1996, 35, 2611-2623. | 1.8 | 86 |

| # | Article | IF | Citations |
|---|---|---|---|
| 505 | New trends in optimization-based approaches to process synthesis. Computers and Chemical Engineering, 1996, 20, 665-683. | 2.0 | 87 |
| 506 | Logic-based MINLP algorithms for the optimal synthesis of process networks. Computers and Chemical Engineering, 1996, 20, 959-978. | 2.0 | 262 |
| 507 | Simultaneous synthesis of distillation sequences in overall process schemes using an improved minlp approach. Computers and Chemical Engineering, 1996, 20, 1425-1440. | 2.0 | 63 |
| 508 | A global optimization algorithm for linear fractional and bilinear programs. Journal of Global Optimization, 1995, 6, 39-76. | 1.1 | 120 |
| 509 | A sensitivity based approach for flexibility analysis and design of linear process systems. Computers and Chemical Engineering, 1995, 19, 1301-1316. | 2.0 | 22 |
| 510 | Global optimization of bilinear process networks with multicomponent flows. Computers and Chemical Engineering, 1995, 19, 1219-1242. | 2.0 | 233 |
| 511 | A Continuous Time Mixed Integer Linear Programming Model for Short Term Scheduling of Multistage Batch Plants. Industrial & Engineering Chemistry Research, 1995, 34, 3037-3051. | 1.8 | 268 |
| 512 | New developments and capabilities in prosynâ€"An automated topology and parameter process synthesizer. Computers and Chemical Engineering, 1994, 18, 1097-1114. | 2.0 | 83 |
| 513 | Logic cuts for processing networks with fixed charges. Computers and Operations Research, 1994, 21, 265-279. | 2.4 | 48 |
| 514 | Modelling and computational techniques for logic based integer programming. Computers and Chemical Engineering, 1994, 18, 563-578. | 2.0 | 435 |
| 515 | Optimal cyclic scheduling of multistage continuous multiproduct plants. Computers and Chemical Engineering, 1994, 18, 797-816. | 2.0 | 142 |
| 516 | Strategic planning model for complete process flexibility. Industrial & Engineering Chemistry Research, 1994, 33, 69-76. | 1.8 | 49 |
| 517 | Design optimization of stochastic flexibility. Computers and Chemical Engineering, 1993, 17, 339-354. | 2.0 | 134 |
| 518 | Symbolic integration of logic in mixed-integer linear programming techniques for process synthesis. Computers and Chemical Engineering, 1993, 17, 909-927. | 2.0 | 85 |
| 519 | An alternate MINLP model for finding the number of trays required for a specified separation objective. Computers and Chemical Engineering, 1993, 17, 949-955. | 2.0 | 65 |
| 520 | Prosyn â€" An automated topology and parameter process synthesizer. Computers and Chemical Engineering, 1993, 17, S87-S94. | 2.0 | 2 |
| 521 | Symbolic integration of logic in MILP branch and bound methods for the synthesis of process networks. Annals of Operations Research, 1993, 42, 169-191. | 2.6 | 13 |
| 522 | The engineering design research center of Carnegie Mellon University. Proceedings of the IEEE, 1993, 81, 10-24. | 16.4 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 523 | Optimal feed locations and number of trays for distillation columns with multiple feeds. Industrial & Engineering Chemistry Research, 1993, 32, 2942-2949. | 1.8 | 114 |
| 524 | Reformulation of the Multiperiod MILP Model for Capacity Expansion of Chemical Processes. Operations Research, 1992, 40, S127-S144. | 1.2 | 45 |
| 525 | An outer-approximation method for multiperiod design optimization. Industrial & Engineering Chemistry Research, 1992, 31, 1466-1477. | 1.8 | 53 |
| 526 | Mixed-integer linear programming reformulations for batch process design with discrete equipment sizes. Industrial & Engineering Chemistry Research, 1992, 31, 1315-1325. | 1.8 | 78 |
| 527 | An LP/NLP based branch and bound algorithm for convex MINLP optimization problems. Computers and Chemical Engineering, 1992, 16, 937-947. | 2.0 | 307 |
| 528 | Multiperiod investment model for processing networks with dedicated and flexible plants. Industrial & Engineering Chemistry Research, 1991, 30, 1165-1171. | 1.8 | 44 |
| 529 | Convergence properties of generalized benders decomposition. Computers and Chemical Engineering, 1991, 15, 481-491. | 2.0 | 121 |
| 530 | Relation between MILP modelling and logical inference for chemical process synthesis. Computers and Chemical Engineering, 1991, 15, 73-84. | 2.0 | 243 |
| 531 | MINLP model for cyclic multiproduct scheduling on continuous parallel lines. Computers and Chemical Engineering, 1991, 15, 85-103. | 2.0 | 140 |
| 532 | Mixed-integer nonlinear programming techniques for the synthesis of engineering systems. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 1990, 1, 205-228. | 1.2 | 82 |
| 533 | Simultaneous optimization models for heat integrationâ€”III. Process and heat exchanger network optimization. Computers and Chemical Engineering, 1990, 14, 1185-1200. | 2.0 | 126 |
| 534 | Prosynâ€”an MINLP process synthesizer. Computers and Chemical Engineering, 1990, 14, 1363-1378. | 2.0 | 72 |
| 535 | Simultaneous optimization models for heat integrationâ€”I. Area and energy targeting and modeling of multi-stream exchangers. Computers and Chemical Engineering, 1990, 14, 1151-1164. | 2.0 | 292 |
| 536 | Simultaneous optimization models for heat integrationâ€”II. Heat exchanger network synthesis. Computers and Chemical Engineering, 1990, 14, 1165-1184. | 2.0 | 895 |
| 537 | Integrated stochastic metric of flexibility for systems with discrete state and continuous parameter uncertainties. Computers and Chemical Engineering, 1990, 14, 967-985. | 2.0 | 100 |
| 538 | A combined penalty function and outer-approximation method for MINLP optimization. Computers and Chemical Engineering, 1990, 14, 769-782. | 2.0 | 622 |
| 539 | Simultaneous synthesis, sizing, and scheduling of multiproduct batch plants. Industrial & Engineering Chemistry Research, 1990, 29, 2242-2251. | 1.8 | 42 |
| 540 | Simultaneous production planning and scheduling in multiproduct batch plants. Industrial & Engineering Chemistry Research, 1990, 29, 570-580. | 1.8 | 88 |

| # | Article | IF | Citations |
|---|---|---|---|
| 541 | Computational experience with dicopt solving MINLP problems in process systems engineering. Computers and Chemical Engineering, 1989, 13, 307-315. | 2.0 | 138 |
| 542 | A modelling and decomposition strategy for the minlp optimization of process flowsheets. Computers and Chemical Engineering, 1989, 13, 797-819. | 2.0 | 186 |
| 543 | Optimal retrofit design for improving process flexibility in nonlinear systemsâ€"II. Optimal level of flexibility. Computers and Chemical Engineering, 1989, 13, 1087-1096. | 2.0 | 38 |
| 544 | Optimal retrofit design for improving process flexibility in nonlinear systemsâ€"I. Fixed degree of flexibility. Computers and Chemical Engineering, 1989, 13, 1003-1016. | 2.0 | 53 |
| 545 | Optimization model for long range planning in the chemical industry. Computers and Chemical Engineering, 1989, 13, 1049-1063. | 2.0 | 163 |
| 546 | Efficient optimization algorithms for zero-wait scheduling of multiproduct batch plants. Industrial & Engineering Chemistry Research, 1989, 28, 1333-1345. | 1.8 | 44 |
| 547 | Optimal retrofit design for improving process flexibility in linear systems. Computers and Chemical Engineering, 1988, 12, 719-731. | 2.0 | 95 |
| 548 | Simultaneous optimization and heat integration with process simulators. Computers and Chemical Engineering, 1988, 12, 311-327. | 2.0 | 55 |
| 549 | Global optimization of nonconvex mixed-integer nonlinear programming (MINLP) problems in process synthesis. Industrial & Engineering Chemistry Research, 1988, 27, 1407-1421. | 1.8 | 165 |
| 550 | Automatic generation of multiperiod heat exchanger network configurations. Computers and Chemical Engineering, 1987, 11, 123-142. | 2.0 | 88 |
| 551 | Optimal retrofit design of multiproduct batch plants. Industrial & Engineering Chemistry Research, 1987, 26, 718-726. | 1.8 | 42 |
| 552 | Relaxation strategy for the structural optimization of process flow sheets. Industrial & Engineering Chemistry Research, 1987, 26, 1869-1880. | 1.8 | 213 |
| 553 | Synthesis of flexible heat exchanger networks with uncertain flowrates and temperatures. Computers and Chemical Engineering, 1987, 11, 319-336. | 2.0 | 129 |
| 554 | Active constraint strategy for flexibility analysis in chemical processes. Computers and Chemical Engineering, 1987, 11, 675-693. | 2.0 | 352 |
| 555 | Simultaneous optimization and heat integration of chemical processes. AICHE Journal, 1986, 32, 123-138. | 1.8 | 374 |
| 556 | Automatic synthesis of optimum heat exchanger network configurations. AICHE Journal, 1986, 32, 276-290. | 1.8 | 425 |
| 557 | A mixed-integer nonlinear programming algorithm for process systems synthesis. AICHE Journal, 1986, 32, 592-606. | 1.8 | 126 |
| 558 | Synthesis of flexible heat exchanger networks for multiperiod operation. Computers and Chemical Engineering, 1986, 10, 153-168. | 2.0 | 105 |

| # | Article | IF | Citations |
|---|---|---|---|
| 559 | An outer-approximation algorithm for a class of mixed-integer nonlinear programs. Mathematical Programming, 1986, 36, 307-339. | 1.6 | 1,153 |
| 560 | Mixed-integer programming approach for the synthesis of integrated process flowsheets. Computers and Chemical Engineering, 1985, 9, 463-482. | 2.0 | 136 |
| 561 | A note on approximation techniques used for process optimization. Computers and Chemical Engineering, 1985, 9, 201-206. | 2.0 | 67 |
| 562 | An index for operational flexibility in chemical process design. Part I: Formulation and theory. AICHE Journal, 1985, 31, 621-630. | 1.8 | 476 |
| 563 | An index for operational flexibility in chemical process design. Part II: Computational algorithms. AICHE Journal, 1985, 31, 631-641. | 1.8 | 185 |
| 564 | Optimal process design under uncertainty. AICHE Journal, 1983, 29, 425-433. | 1.8 | 395 |
| 565 | Optimization strategies for flexible chemical processes. Computers and Chemical Engineering, 1983, 7, 439-462. | 2.0 | 170 |
| 566 | A structural optimization approach in process synthesisâ€"I. Computers and Chemical Engineering, 1983, 7, 695-706. | 2.0 | 309 |
| 567 | A structural optimization approach in process synthesisâ€"II. Computers and Chemical Engineering, 1983, 7, 707-721. | 2.0 | 615 |
| 568 | INCORPORATING TOXICOLOGY IN THE SYNTHESIS OF INDUSTRIAL CHEMICAL COMPLEXES. Chemical Engineering Communications, 1982, 17, 151-170. | 1.5 | 58 |
| 569 | Decomposition strategy for designing flexible chemical plants. AICHE Journal, 1982, 28, 686-694. | 1.8 | 61 |
| 570 | Applications of mixed-integer linear programming in process synthesis. Computers and Chemical Engineering, 1980, 4, 205-214. | 2.0 | 62 |
| 571 | Optimum Design of Multipurpose Chemical Plants. Industrial & Engineering Chemistry Process Design and Development, 1979, 18, 343-348. | 0.6 | 183 |
| 572 | Optimum design of heat exchanger networks. Computers and Chemical Engineering, 1978, 2, 1-7. | 2.0 | 90 |
| 573 | Optimum design of chemical plants with uncertain parameters. AICHE Journal, 1978, 24, 1021-1028. | 1.8 | 177 |
| 574 | MILP Optimization Models for Short-term Scheduling of Batch Processes. , 0, , 163-184. | | 4 |
| 575 | Optimization of the hydrothermal production of fuels from alage Â. , 0, , . | | 0 |
| 576 | Design space description through adaptive sampling and symbolic computation. AICHE Journal, 0, , . | 1.8 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 577 | Pipeline network design for gathering unconventional oil and gas production using mathematical optimization. Optimization and Engineering, 0, , 1. | 1.3 | 7 |