Optimal design of sustainable cellulosic biofuel supply coupled with life cycle assessment and input–output

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#	Article	IF	CITATIONS
1	Life Cycle Optimization of Biomass-to-Liquid Supply Chains with Distributed–Centralized Processing Networks. Industrial & Engineering Chemistry Research, 2011, 50, 10102-10127.	1.8	303
2	Multiobjective optimization of hydrocarbon biorefinery supply chain designs under uncertainty., 2012,,.		5
3	Towards model-based design of biofuel value chains. Current Opinion in Chemical Engineering, 2012, 1, 465-471.	3.8	11
4	Process synthesis for addressing the sustainable energy systems and environmental issues. AICHE Journal, 2012, 58, 3370-3389.	1.8	49
5	Optimizing the economics and the carbon and water footprints of bioethanol supply chains. Biofuels, Bioproducts and Biorefining, 2012, 6, 656-672.	1.9	41
6	Advances in mathematical programming models for enterprise-wide optimization. Computers and Chemical Engineering, 2012, 47, 2-18.	2.0	167
7	Integration of market dynamics into the design of biofuel processes. Computer Aided Chemical Engineering, 2012, , 850-854.	0.3	9
8	Design under uncertainty of hydrocarbon biorefinery supply chains: Multiobjective stochastic programming models, decomposition algorithm, and a Comparison between CVaR and downside risk. AICHE Journal, 2012, 58, 2155-2179.	1.8	200
9	Polymerization on heating up of bioâ€oil: A model compound study. AICHE Journal, 2013, 59, 888-900.	1.8	150
10	Sustainable design and synthesis of algaeâ€based biorefinery for simultaneous hydrocarbon biofuel production and carbon sequestration. AICHE Journal, 2013, 59, 1599-1621.	1.8	128
11	Sustainable scheduling of batch processes under economic and environmental criteria with MINLP models and algorithms. Computers and Chemical Engineering, 2013, 54, 44-59.	2.0	61
12	Optimization of Pathways for Biorefineries Involving the Selection of Feedstocks, Products, and Processing Steps. Industrial & Engineering Chemistry Research, 2013, 52, 5177-5190.	1.8	52
13	Multiscale strategic planning model for the design of integrated ethanol and gasoline supply chain. AICHE Journal, 2013, 59, 4655-4672.	1.8	26
14	Hardwood Biomass to Gasoline, Diesel, and Jet Fuel: 1. Process Synthesis and Global Optimization of a Thermochemical Refinery. Energy & Samp; Fuels, 2013, 27, 4302-4324.	2.5	75
15	Process systems engineering for biorefineries: new research vistas. Current Opinion in Chemical Engineering, 2013, 2, 442-447.	3.8	30
16	Sustainable design and synthesis of hydrocarbon biorefinery via gasification pathway: Integrated life cycle assessment and technoeconomic analysis with multiobjective superstructure optimization. Computers and Chemical Engineering, 2013, 52, 55-76.	2.0	175
17	Optimal design of sustainable hydrogen networks. International Journal of Hydrogen Energy, 2013, 38, 2937-2950.	3.8	62
18	Design of Biofuel Supply Chains under Uncertainty with Multiobjective Stochastic Programming Models and Decomposition Algorithm. Computer Aided Chemical Engineering, 2013, , 493-498.	0.3	7

#	Article	IF	Citations
19	Modeling Integrated Biorefinery Supply Chains. Computer Aided Chemical Engineering, 2013, , 79-84.	0.3	9
20	Life cycle optimization for sustainable design and operations of hydrocarbon biorefinery via fast pyrolysis, hydrotreating and hydrocracking. Computers and Chemical Engineering, 2013, 50, 71-91.	2.0	137
21	Optimal planning for the sustainable utilization of municipal solid waste. Waste Management, 2013, 33, 2607-2622.	3.7	149
22	A risk management approach to the economic and environmental strategic design of ethanol supply chains. Biomass and Bioenergy, 2013, 58, 31-51.	2.9	74
23	Multi-objective optimization of process cogeneration systems with economic, environmental, and social tradeoffs. Clean Technologies and Environmental Policy, 2013, 15, 185-197.	2.1	76
24	Multiobjective optimization of biorefineries with economic and safety objectives. AICHE Journal, 2013, 59, 2427-2434.	1.8	96
25	Engineering Biomass Conversion Processes: A Systems Perspective. AICHE Journal, 2013, 59, 3-18.	1.8	62
26	Chemicals from Biomass in One Step – Without Biology!. Focus on Catalysts, 2013, 2013, 1.	0.7	0
27	Stochastic optimization of a multi-feedstock lignocellulosic-based bioethanol supply chain under multiple uncertainties. Energy, 2013, 59, 157-172.	4.5	106
28	Synthesis of integrated absorption refrigeration systems involving economic and environmental objectives and quantifying social benefits. Applied Thermal Engineering, 2013, 52, 402-419.	3.0	38
29	Biomass supply chain design and analysis: Basis, overview, modeling, challenges, and future. Renewable and Sustainable Energy Reviews, 2013, 24, 608-627.	8.2	324
30	Hardwood Biomass to Gasoline, Diesel, and Jet Fuel: 2. Supply Chain Optimization Framework for a Network of Thermochemical Refineries. Energy & Samp; Fuels, 2013, 27, 4325-4352.	2.5	51
31	Robust Scenario Formulations for Strategic Supply Chain Optimization under Uncertainty. Industrial & Lamp; Engineering Chemistry Research, 2013, 52, 5721-5734.	1.8	26
32	Biorefinery Location and Technology Selection Through Supply Chain Optimization. Industrial & Engineering Chemistry Research, 2013, 52, 3192-3208.	1.8	94
33	Scenario-based strategic supply chain design and analysis for the forest biorefinery using an operational supply chain model. International Journal of Production Economics, 2013, 144, 618-634.	5.1	41
34	Life-Cycle Environmental Impacts of Biofuels and Co-products. , 2013, , 471-499.		3
35	Process synthesis and optimization of a sustainable integrated biorefinery via fuzzy optimization. AICHE Journal, 2013, 59, 4212-4227.	1.8	57
36	Design of Sustainable Product Systems and Supply Chains with Life Cycle Optimization Based on Functional Unit: General Modeling Framework, Mixed-Integer Nonlinear Programming Algorithms and Case Study on Hydrocarbon Biofuels. ACS Sustainable Chemistry and Engineering, 2013, 1, 1003-1014.	3.2	154

#	Article	IF	CITATIONS
37	An integrated optimization model for switchgrass-based bioethanol supply chain. Applied Energy, 2013, 102, 1205-1217.	5.1	164
38	Spatially Explicit Multiobjective Optimization for the Strategic Design of First and Second Generation Biorefineries Including Carbon and Water Footprints. Industrial & Engineering Chemistry Research, 2013, 52, 7170-7180.	1.8	55
39	Optimal design of ethanol supply chains considering carbon trading effects and multiple technologies for side-product exploitation. Environmental Technology (United Kingdom), 2013, 34, 2189-2199.	1.2	20
40	Synthesis of Distributed Biorefining Networks for the Value-Added Processing of Water Hyacinth. ACS Sustainable Chemistry and Engineering, 2013, 1, 284-305.	3.2	38
41	Sustainability of soil fertility and the use of lignocellulosic crop harvest residues for the production of biofuels: a literature review. Environmental Technology (United Kingdom), 2013, 34, 1725-1734.	1.2	12
42	Economics, Environmental Impacts, and Supply Chain Analysis of Cellulosic Biomass for Biofuels in the Southern US: Pine, Eucalyptus, Unmanaged Hardwoods, Forest Residues, Switchgrass, and Sweet Sorghum. BioResources, 2013, 9, .	0.5	19
43	Designing Energy Supply Chains with the P-graph Framework under Cost Constraints and Sustainability Considerations. Computer Aided Chemical Engineering, 2014, 33, 1009-1014.	0.3	5
44	An LCA study of an electricity coal supply chain. Journal of Industrial Engineering and Management, 2014, 10, .	1.0	8
45	An Extended Input Output Table Compiled for Analyzing Water Demand and Consumption at County Level in China. Sustainability, 2014, 6, 3301-3320.	1.6	76
46	Functional-unit-based life cycle optimization of sustainable biomass-to-electricity supply chain with economic and environmental tradeoffs. Computer Aided Chemical Engineering, 2014, , 651-656.	0.3	5
47	Design Methodology of Biomass Utilization System Considering Impacts on Petroleum Refining Industry. Computer Aided Chemical Engineering, 2014, 33, 1003-1008.	0.3	0
48	Designing a Dedicated Energy Crop Supply System in Tennessee: A Multiobjective Optimization Analysis. Journal of Agricultural & Description (2014, 46, 357-373).	0.8	15
49	Economics and Uncertainty of Lignocellulosic Biofuel Production from Energy Cane and Sweet Sorghum in South Texas. Journal of Agricultural & Applied Economics, 2014, 46, 457-485.	0.8	15
50	Making transportation fuels and electricity from non-petroleum-based hybrid processes: process design and optimization. Computer Aided Chemical Engineering, 2014, 34, 537-542.	0.3	1
51	MINLP model and algorithm for superstructure optimization of algae processing network. Computer Aided Chemical Engineering, 2014, 34, 531-536.	0.3	2
52	Current trends and directions in achieving sustainability in the biofuel and bioenergy supply chain. Current Opinion in Chemical Engineering, 2014, 6, 55-60.	3.8	22
53	Agent-based method for solving competitive biorefinery network design problem. , 2014, , .		0
54	Une méthode intégrée pour la gestion des chaînes logistiques durables. Logistique & Management, 2014, 22, 43-56.	0.3	1

#	Article	lF	Citations
55	Fair profit allocation in supply chain optimization with transfer price and revenue sharing: MINLP model and algorithm for cellulosic biofuel supply chains. AICHE Journal, 2014, 60, 3211-3229.	1.8	50
56	Nationwide, Regional, and Statewide Energy Supply Chain Optimization for Natural Gas to Liquid Transportation Fuel (GTL) Systems. Industrial & Engineering Chemistry Research, 2014, 53, 5366-5397.	1.8	31
57	Optimal design of advanced drop-in hydrocarbon biofuel supply chain integrating with existing petroleum refineries under uncertainty. Biomass and Bioenergy, 2014, 60, 108-120.	2.9	98
58	A hybrid multi-objective approach to capacitated facility location with flexible store allocation for green logistics modeling. Transportation Research, Part E: Logistics and Transportation Review, 2014, 66, 1-22.	3.7	125
59	Biomass-to-bioenergy and biofuel supply chain optimization: Overview, key issues and challenges. Computers and Chemical Engineering, 2014, 66, 36-56.	2.0	563
60	Multiobjective design of interplant trigeneration systems. AICHE Journal, 2014, 60, 213-236.	1.8	30
61	Modelling food logistics networks with emission considerations: The case of an international beef supply chain. International Journal of Production Economics, 2014, 152, 57-70.	5.1	186
62	Sustainable process design and synthesis of hydrocarbon biorefinery through fast pyrolysis and hydroprocessing. AICHE Journal, 2014, 60, 980-994.	1.8	40
63	Integrated supply chain design for commodity chemicals production via woody biomass fast pyrolysis and upgrading. Bioresource Technology, 2014, 157, 28-36.	4.8	27
64	Stochastic Programming Approach to Optimal Design and Operations of Integrated Hydrocarbon Biofuel and Petroleum Supply Chains. ACS Sustainable Chemistry and Engineering, 2014, 2, 49-61.	3.2	87
65	Economic and environmental optimization of a large scale sustainable dual feedstock lignocellulosic-based bioethanol supply chain in a stochastic environment. Applied Energy, 2014, 114, 572-587.	5.1	92
66	Chemicals from biomass – managing greenhouse gas emissions in biorefinery production chains – a review. Journal of Cleaner Production, 2014, 75, 1-10.	4.6	95
67	Multi-period synthesis of optimally integrated biomass and bioenergy supply network. Computers and Chemical Engineering, 2014, 66, 57-70.	2.0	117
68	Integrating multimodal transport into cellulosic biofuel supply chain design under feedstock seasonality with a case study based on California. Bioresource Technology, 2014, 152, 15-23.	4.8	82
69	Methods and tools for sustainable process design. Current Opinion in Chemical Engineering, 2014, 6, 69-74.	3.8	33
70	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
71	Energy Supply Chain Optimization of Hybrid Feedstock Processes: A Review. Annual Review of Chemical and Biomolecular Engineering, 2014, 5, 147-179.	3.3	41
72	Game-theoretic modeling and optimization of multi-echelon supply chain design and operation under Stackelberg game and market equilibrium. Computers and Chemical Engineering, 2014, 71, 347-361.	2.0	133

#	Article	IF	CITATIONS
73	Optimal Design and Synthesis of Algal Biorefinery Processes for Biological Carbon Sequestration and Utilization with Zero Direct Greenhouse Gas Emissions: MINLP Model and Global Optimization Algorithm. Industrial & Engineering Chemistry Research, 2014, 53, 1563-1579.	1.8	109
74	Biorefinery Supply Chain Network Design under Competitive Feedstock Markets: An Agent-Based Simulation and Optimization Approach. Industrial & Engineering Chemistry Research, 2014, 53, 15111-15126.	1.8	37
75	Sustainable Design and Operation of Cellulosic Bioelectricity Supply Chain Networks with Life Cycle Economic, Environmental, and Social Optimization. Industrial & Engineering Chemistry Research, 2014, 53, 4008-4029.	1.8	111
76	Optimal design of process energy systems integrating sustainable considerations. Energy, 2014, 76, 139-160.	4.5	29
77	Analyzing the impact of intermodal-related risk to the design and management of biofuel supply chain. Transportation Research, Part E: Logistics and Transportation Review, 2014, 69, 122-145.	3.7	80
78	A mixed integer nonlinear programming (MINLP) supply chain optimisation framework for carbon negative electricity generation using biomass to energy with CCS (BECCS) in the UK. International Journal of Greenhouse Gas Control, 2014, 28, 189-202.	2.3	51
79	Optimization of the Supply Chain Associated to the Production of Bioethanol from Residues of Agave from the Tequila Process in Mexico. Industrial & Engineering Chemistry Research, 2014, 53, 5524-5538.	1.8	17
80	An Optimal Planning for the Reuse of Municipal Solid Waste Considering Economic, Environmental and Safety Objectives. Computer Aided Chemical Engineering, 2014, , 1027-1032.	0.3	3
81	A Multiobjective Optimization Approach for the Development of a Sustainable Supply Chain of a New Fixative in the Perfume Industry. ACS Sustainable Chemistry and Engineering, 2014, 2, 2380-2390.	<b>3.2</b>	21
82	Sustainable Integration of Trigeneration Systems with Heat Exchanger Networks. Industrial & Engineering Chemistry Research, 2014, 53, 2732-2750.	1.8	21
83	Sustainable Design and Synthesis of Algal Biorefinery for Biofuel Production. Computer Aided Chemical Engineering, 2014, , 1429-1434.	0.3	1
84	Assessment and optimization of forest biomass supply chains from economic, social and environmental perspectives – A review of literature. Renewable and Sustainable Energy Reviews, 2014, 36, 62-73.	8.2	280
85	Regional Allocation of Biomass to U.S. Energy Demands under a Portfolio of Policy Scenarios. Environmental Science & Environme	4.6	12
86	Disjunctive fuzzy optimisation for planning and synthesis of bioenergy-based industrial symbiosis system. Journal of Environmental Chemical Engineering, 2014, 2, 652-664.	3.3	36
87	Optimal planning and site selection for distributed multiproduct biorefineries involving economic, environmental and social objectives. Journal of Cleaner Production, 2014, 65, 270-294.	4.6	239
88	Optimal grid design and logistic planning for wind and biomass based renewable electricity supply chains under uncertainties. Energy, 2014, 70, 514-528.	4.5	37
89	Robust design and operations of hydrocarbon biofuel supply chain integrating with existing petroleum refineries considering unit cost objective. Computers and Chemical Engineering, 2014, 68, 128-139.	2.0	110
90	Integrating biogeophysical and social assets into biomass-to-biofuel supply chain siting decisions. Biomass and Bioenergy, 2014, 66, 410-418.	2.9	23

#	Article	IF	CITATIONS
91	Optimization of pre-treatment selection for the use of woody waste in co-combustion plants. Chemical Engineering Research and Design, 2014, 92, 1539-1562.	2.7	35
92	Estimating the variable cost for high-volume and long-haul transportation of densified biomass and biofuel. Transportation Research, Part D: Transport and Environment, 2014, 29, 40-55.	3.2	19
93	Genetic algorithm based multi-objective optimization of wheat flour supply chain considering raw material substitution. , 2015, , .		1
94	A multiobjective optimization framework for design of integrated biorefineries under uncertainty. AICHE Journal, 2015, 61, 3208-3222.	1.8	37
95	A critical analysis of thermochemical cellulosic biorefinery capital cost estimates. Biofuels, Bioproducts and Biorefining, 2015, 9, 412-421.	1.9	20
96	Sustainable process design by the process to planet framework. AICHE Journal, 2015, 61, 3320-3331.	1.8	28
97	Life Cycle Network Modeling Framework and Solution Algorithms for Systems Analysis and Optimization of the Water-Energy Nexus. Processes, 2015, 3, 514-539.	1.3	25
98	Design of Sustainable Biofuel Processes and Supply Chains: Challenges and Opportunities. Processes, 2015, 3, 634-663.	1.3	36
99	Supply Chains and Optimization for Biorefineries. Computer Aided Chemical Engineering, 2015, 36, 475-497.	0.3	5
100	Optimal planning for the reuse of municipal solid waste considering economic, environmental, and safety objectives. AICHE Journal, 2015, 61, 1881-1899.	1.8	32
101	Strategic planning design of microalgae biomass-to-biodiesel supply chain network: Multi-period deterministic model. Applied Energy, 2015, 154, 528-542.	5.1	81
102	An interactive decision-support system for multi-objective optimization of nonlinear dynamic processes with uncertainty. Expert Systems With Applications, 2015, 42, 7710-7731.	4.4	45
103	Bioethanol Supply Chain Design and Optimization. Computer Aided Chemical Engineering, 2015, 36, 555-581.	0.3	0
104	Supply Chain Risk Assessment Based on AHP and Fuzzy Comprehensive Assessment Mode: A Case Study of the Chemical Supply Chain. International Journal of U- and E- Service, Science and Technology, 2015, 8, 227-234.	0.1	2
105	Optimal design and operations of supply chain networks for water management in shale gas production: MILFP model and algorithms for the waterâ€energy nexus. AICHE Journal, 2015, 61, 1184-1208.	1.8	117
106	LCA-based optimization of wood utilization under special consideration of a cascading use of wood. Journal of Environmental Management, 2015, 152, 158-170.	3.8	81
107	Sustainable supply chain network design: An optimization-oriented review. Omega, 2015, 54, 11-32.	3.6	487
108	Process Design and Optimization of an Integrated Shale Gas Process for Green Chemicals Production. Computer Aided Chemical Engineering, 2015, , 1397-1402.	0.3	8

#	Article	IF	CITATIONS
109	Some efficient approaches for multi-objective constrained optimization of computationally expensive black-box model problems. Computers and Chemical Engineering, 2015, 82, 228-239.	2.0	17
110	Sustainable performance evaluation of the supply chain. , 2015, , .		5
111	Shale Gas Supply Chain Design and Operations toward Better Economic and Life Cycle Environmental Performance: MINLP Model and Global Optimization Algorithm. ACS Sustainable Chemistry and Engineering, 2015, 3, 1282-1291.	3.2	146
112	Strategic optimization of forest residues to bioenergy and biofuel supply chain. International Journal of Energy Research, 2015, 39, 439-452.	2.2	81
113	Modelling the properties of liquid foods for use of process flowsheeting simulators: Application to milk concentration. Journal of Food Engineering, 2015, 164, 70-89.	2.7	24
114	Process systems engineering studies for the synthesis of catalytic biomass-to-fuels strategies. Computers and Chemical Engineering, 2015, 81, 57-69.	2.0	45
115	BVCM: A comprehensive and flexible toolkit for whole system biomass value chain analysis and optimisation $\hat{a} \in \text{``Mathematical formulation.}$ Applied Energy, 2015, 147, 131-160.	5.1	65
116	Using national inventories for estimating environmental impacts of products from industrial sectors: a case study of ethanol and gasoline. International Journal of Life Cycle Assessment, 2015, 20, 597-607.	2.2	20
117	Stochastic optimization of sustainable hybrid generation bioethanol supply chains. Transportation Research, Part E: Logistics and Transportation Review, 2015, 77, 1-28.	3.7	55
118	Design and Planning ofÂSustainable Supply Chains. Computer Aided Chemical Engineering, 2015, 36, 333-353.	0.3	4
119	Stochastic optimization of sustainable industrial symbiosis based hybrid generation bioethanol supply chains. Computers and Industrial Engineering, 2015, 87, 40-65.	3.4	77
120	A decision model for cost effective design of biomass based green energy supply chains. Bioresource Technology, 2015, 191, 97-109.	4.8	35
121	Supply chain design and optimization: Challenges and opportunities. Computers and Chemical Engineering, 2015, 81, 153-170.	2.0	224
122	A comprehensive techno-economic analysis tool to validate long-term viability of emerging biorefining processes. Clean Technologies and Environmental Policy, 2015, 17, 1793-1806.	2.1	16
123	Synergies between Geological Sequestration and Microalgae Biofixation for Greenhouse Gas Abatement: Life Cycle Design of Carbon Capture, Utilization, and Storage Supply Chains. ACS Sustainable Chemistry and Engineering, 2015, 3, 841-861.	3.2	32
124	Locating and Designing a Biorefinery Supply Chain under Uncertainty in Navarre: A Stochastic Facility Location Problem Case. Transportation Research Procedia, 2015, 10, 704-713.	0.8	18
125	A Methodology for Integrated, Multiregional Life Cycle Assessment Scenarios under Large-Scale Technological Change. Environmental Science & Environmen	4.6	107
126	Decision Support Models for Integrated Design of Bioenergy Supply Chains. Energy Systems, 2015, , 163-190.	0.5	4

#	Article	IF	CITATIONS
127	A decision support environment for the high-throughput model-based screening and integration of biomass processing paths. Industrial Crops and Products, 2015, 75, 103-113.	2.5	14
128	An optimization model for sequential fast pyrolysis facility location-allocation under renewable fuel standard. Energy, 2015, 93, 1165-1172.	4.5	4
129	A supply chain design approach considering environmentally sensitive customers: the case of a German manufacturing SME. International Journal of Production Research, 2015, 53, 6534-6550.	4.9	45
130	Value-Added Chemicals from Microalgae: Greener, More Economical, or Both?. ACS Sustainable Chemistry and Engineering, 2015, 3, 82-96.	3.2	108
131	Toward more costâ€effective and greener chemicals production from shale gas by integrating with bioethanol dehydration: Novel process design and simulationâ€based optimization. AICHE Journal, 2015, 61, 1209-1232.	1.8	64
132	Optimal planning, design and synthesis of symbiotic bioenergy parks. Journal of Cleaner Production, 2015, 87, 291-302.	4.6	35
133	Synthesis of environmentally-benign energy self-sufficient processes under uncertainty. Journal of Cleaner Production, 2015, 88, 90-104.	4.6	12
134	Strategic planning optimization for natural gas to liquid transportation fuel (GTL) systems. Computers and Chemical Engineering, 2015, 72, 109-125.	2.0	19
135	Multiobjective optimization of product and process networks: General modeling framework, efficient global optimization algorithm, and case studies on bioconversion. AICHE Journal, 2015, 61, 530-554.	1.8	83
136	Towards supply chain sustainability: economic, environmental and social design and planning. Journal of Cleaner Production, 2015, 105, 14-27.	4.6	313
137	Rules and benefits of Life Cycle Assessment in green chemical process and synthesis design: a tutorial review. Green Chemistry, 2015, 17, 123-145.	4.6	201
138	An integrated approach for sustainable supply chain planning. Computers and Operations Research, 2015, 54, 180-194.	2.4	143
139	A bottom-up biofuel market equilibrium model for policy analysis. Annals of Operations Research, 2016, 236, 75-101.	2.6	12
140	Ammonia supply chains: A new framework for renewable generation with a case study for Minnesota. Computer Aided Chemical Engineering, 2016, 38, 1395-1400.	0.3	4
141	Biomass supply, demand, and markets. , 2016, , 85-100.		4
142	Embedding Sustainability in Product and Process Development—The Role ofÂProcess Systems Engineers. , 2016, , 353-378.		2
143	Modeling of forest and wood residues supply chains for bioenergy and biofuel production. , 2016, , 167-190.		6
144	Biomass and biofuel supply chain modeling and optimization. , 2016, , 149-166.		3

#	Article	IF	CITATIONS
145	Conceptual Chemical Process Design forÂSustainability. , 2016, , 67-85.		4
146	Quantifying the Impact of Feedstock Quality on the Design of Bioenergy Supply Chain Networks. Energies, 2016, 9, 203.	1.6	15
147	A Sustainable Performance Assessment Framework for Plastic Film Supply Chain Management from a Chinese Perspective. Sustainability, 2016, 8, 1042.	1.6	24
148	Assessing the capacity of local ecosystems to meet industrial demand for ecosystem services. AICHE Journal, 2016, 62, 3319-3333.	1.8	34
149	Earlyâ€stage evaluation of biorefinery processing pathways using process network flux analysis. AICHE Journal, 2016, 62, 3096-3108.	1.8	34
150	Financial sustainability for a lignocellulosic biorefinery under carbon constraints and price downside risk. Applied Energy, 2016, 177, 98-107.	5.1	8
151	A model for improving sustainable green waste recovery. Resources, Conservation and Recycling, 2016, 110, 61-73.	<b>5.</b> 3	35
152	Life cycle energy and CO2 emission optimization for biofuel supply chain planning under uncertainties. Energy, 2016, 103, 151-166.	4.5	48
153	Analysis of environmental and economic tradeoffs in switchgrass supply chains for biofuel production. Energy, 2016, 107, 791-803.	4.5	16
154	Sustainability decision support framework for industrial system prioritization. AICHE Journal, 2016, 62, 108-130.	1.8	74
155	Stochastic design of biorefinery supply chains considering economic and environmental objectives. Journal of Cleaner Production, 2016, 136, 224-245.	4.6	64
156	A framework for multi-stakeholder decision-making and conflict resolution. Computers and Chemical Engineering, 2016, 90, 136-150.	2.0	58
157	Supply chain optimization of sugarcane first generation and eucalyptus second generation ethanol production in Brazil. Applied Energy, 2016, 173, 494-510.	5.1	67
158	Cost versus life cycle assessment-based environmental impact optimization of drinking water production plants. Journal of Environmental Management, 2016, 177, 278-287.	3.8	13
159	RePSIM metric for design of sustainable renewable based fuel and power production processes. Energy, 2016, 114, 833-845.	4.5	28
160	Biomass supply chain network design: An optimization-oriented review and analysis. Industrial Crops and Products, 2016, 94, 972-1000.	2.5	189
161	A hybrid decomposition algorithm for designing a multi-modal transportation network under biomass supply uncertainty. Transportation Research, Part E: Logistics and Transportation Review, 2016, 94, 1-25.	3.7	40
162	Incorporating social benefits in multi-objective optimization of forest-based bioenergy and biofuel supply chains. Applied Energy, 2016, 178, 721-735.	5.1	133

#	Article	IF	CITATIONS
163	On the importance of integrating alternative renewable energy resources and their life cycle networks in the eco-design of conventional drinking water plants. Journal of Cleaner Production, 2016, 135, 872-883.	4.6	18
164	Designing integrated local production systems: A study on the food-energy-water nexus. Journal of Cleaner Production, 2016, 135, 1065-1084.	4.6	101
165	A retrospective analysis of benefits and impacts of U.S. renewable portfolio standards. Energy Policy, 2016, 96, 645-660.	4.2	122
166	Marrying supply chain sustainability and resilience: A match made in heaven. Transportation Research, Part E: Logistics and Transportation Review, 2016, 91, 306-324.	3.7	248
167	Total Chain Integration of sustainable biorefinery systems. Applied Energy, 2016, 184, 1432-1446.	5.1	86
168	Biomass-Based Production of Benzene, Toluene, and Xylenes via Methanol: Process Synthesis and Deterministic Global Optimization. Energy & Energy & 2016, 30, 4970-4998.	2.5	91
169	Life cycle assessment of biomass-to-energy systems in Ireland modelled with biomass supply chain optimisation based on greenhouse gas emission reduction. Energy, 2016, 109, 1040-1055.	4.5	42
170	A framework for techno-economic & Environmental sustainability analysis by risk assessment for conceptual process evaluation. Biochemical Engineering Journal, 2016, 116, 146-156.	1.8	34
171	Financial Risk Assessment and Optimal Planning of Biofuels Supply Chains under Uncertainty. Bioenergy Research, 2016, 9, 1053-1069.	2.2	31
172	Multiâ€scale systems engineering for energy and the environment: Challenges and opportunities. AICHE Journal, 2016, 62, 602-623.	1.8	78
173	Optimal supply chain design and operations under multiâ€scale uncertainties: Nested stochastic robust optimization modeling framework and solution algorithm. AICHE Journal, 2016, 62, 3041-3055.	1.8	69
174	Coupling input–output analysis with multiobjective linear programming models for the study of economy–energy–environment–social (E3S) trade-offs: a review. Annals of Operations Research, 2016, 247, 471-502.	2.6	42
175	Integrating Hybrid Life Cycle Assessment with Multiobjective Optimization: A Modeling Framework. Environmental Science & Envir	4.6	81
176	Multiobjective Robust Possibilistic Programming Approach to Sustainable Bioethanol Supply Chain Design under Multiple Uncertainties. Industrial & Engineering Chemistry Research, 2016, 55, 237-256.	1.8	108
177	Design of Cellulosic Ethanol Supply Chains with Regional Depots. Industrial & Engineering Chemistry Research, 2016, 55, 3420-3432.	1.8	26
178	The water-energy-food nexus and process systems engineering: A new focus. Computers and Chemical Engineering, 2016, 91, 49-67.	2.0	234
179	Streamlining scenario analysis and optimization of key choices in value chains using a modular LCA approach. International Journal of Life Cycle Assessment, 2016, 21, 510-522.	2.2	37
180	Some remarks on computational approaches towards sustainable complex agri-food systems. Trends in Food Science and Technology, 2016, 48, 88-101.	7.8	28

#	ARTICLE	IF	CITATIONS
181	An archive-based multi-objective evolutionary algorithm with adaptive search space partitioning to deal with expensive optimization problems: Application to process eco-design. Computers and Chemical Engineering, 2016, 87, 95-110.	2.0	13
182	An integrated supply chain: A large scale complementarity model for the biofuel markets. Biomass and Bioenergy, 2016, 86, 88-104.	2.9	14
183	Supply Chain Design and Management for Syngas Production. ACS Sustainable Chemistry and Engineering, 2016, 4, 890-900.	3.2	16
184	Economic and life cycle environmental optimization of forest-based biorefinery supply chains for bioenergy and biofuel production. Chemical Engineering Research and Design, 2016, 107, 218-235.	2.7	88
185	Multiobjective optimization of a sugarcane biorefinery involving process and environmental aspects. Renewable Energy, 2016, 96, 1142-1152.	4.3	26
186	Design of bioethanol green supply chain: Comparison between first and second generation biomass concerning economic, environmental and social criteria. Computers and Chemical Engineering, 2016, 85, 16-35.	2.0	119
187	Eco-efficient supply chain networks: development of a design framework and application to a real case study. Production Planning and Control, 2016, 27, 157-168.	5.8	41
188	Combined application of multi-criteria optimization and life-cycle sustainability assessment for optimal distribution of alternative passenger cars in U.S Journal of Cleaner Production, 2016, 112, 291-307.	4.6	99
189	Models for optimization and performance evaluation of biomass supply chains: An Operations Research perspective. Renewable Energy, 2016, 87, 977-989.	4.3	149
190	Building the "Triple R―in global manufacturing. International Journal of Production Economics, 2017, 183, 607-619.	5.1	28
191	Assessing alternative production options for eco-efficient food supply chains using multi-objective optimization. Annals of Operations Research, 2017, 250, 341-362.	2.6	40
192	Designing a Reliable and Dynamic Multimodal Transportation Network for Biofuel Supply Chains. Transportation Science, 2017, 51, 494-517.	2.6	51
193	Optimal location of biorefineries considering sustainable integration with the environment. Renewable Energy, 2017, 100, 65-77.	4.3	35
194	Sustainable design of biorefinery processes: existing practices and new methodology. Biofuels, Bioproducts and Biorefining, 2017, 11, 373-395.	1.9	36
195	Design and optimization of shale gas energy systems: Overview, research challenges, and future directions. Computers and Chemical Engineering, 2017, 106, 699-718.	2.0	91
196	Economy wide impacts of ethanol and biodiesel policy in Canada: An input–output analysis. International Journal of Green Energy, 2017, 14, 400-415.	2.1	5
197	Integrated Multimodal Transportation Model for a Switchgrass-Based Bioethanol Supply Chain: Case Study in North Dakota. Transportation Research Record, 2017, 2628, 32-41.	1.0	13
198	Holistic framework for land settlement development project sustainability assessment: Comparison of El Hierro Island hydro wind project and Sivens dam project. Computers and Chemical Engineering, 2017, 100, 153-176.	2.0	9

#	Article	IF	CITATIONS
199	Towards an Integrated Sustainability Assessment of Biorefineries. , 2017, , 259-301.		2
200	Bioeconomy: Multidimensional Impacts and Challenges. , 2017, , 317-343.		2
201	Determining an Optimal Area to Locate a Biorefinery under Economic and Environmental Criteria. Transportation Research Procedia, 2017, 22, 95-104.	0.8	8
202	The U.S. cellulosic biofuels industry: Expert views on commercialization drivers and barriers. Biomass and Bioenergy, 2017, 102, 52-61.	2.9	47
203	Progress in biofuel production from gasification. Progress in Energy and Combustion Science, 2017, 61, 189-248.	15.8	483
204	Synergies and trade-offs in renewable energy landscapes: Balancing energy production with economics and ecosystem services. Applied Energy, 2017, 199, 25-44.	5.1	29
205	Optimization formulations for multi-product supply chain networks. Computers and Chemical Engineering, 2017, 104, 296-310.	2.0	45
206	An optimisation framework for the strategic design of synthetic natural gas (BioSNG) supply chains. Applied Energy, 2017, 187, 929-955.	5.1	32
207	A cyberGIS approach to uncertainty and sensitivity analysis in biomass supply chain optimization. Applied Energy, 2017, 203, 26-40.	5.1	65
208	Rigorous analysis of Pareto fronts in sustainability studies based on bilevel optimization: Application to the redesign of the UK electricity mix. Journal of Cleaner Production, 2017, 164, 1602-1613.	4.6	25
209	The facility location problem from the perspective of triple bottom line accounting of sustainability. International Journal of Production Research, 2017, 55, 6266-6287.	4.9	56
210	A comprehensive model for design and analysis of bioethanol production and supply strategies from lignocellulosic biomass. Renewable Energy, 2017, 112, 247-259.	4.3	34
211	Modeling framework and computational algorithm for hedging against uncertainty in sustainable supply chain design using functional-unit-based life cycle optimization. Computers and Chemical Engineering, 2017, 107, 221-236.	2.0	35
212	Economic and Environmental Life Cycle Optimization of Noncooperative Supply Chains and Product Systems: Modeling Framework, Mixed-Integer Bilevel Fractional Programming Algorithm, and Shale Gas Application. ACS Sustainable Chemistry and Engineering, 2017, 5, 3362-3381.	3.2	50
213	A generalized disjunctive programming framework for the optimal synthesis and analysis of processes for ethanol production from corn stover. Bioresource Technology, 2017, 236, 212-224.	4.8	3
214	Supply chain network design under uncertainty: A comprehensive review and future research directions. European Journal of Operational Research, 2017, 263, 108-141.	3.5	461
215	Linear programming-based directed local search for expensive multi-objective optimization problems: Application to drinking water production plants. European Journal of Operational Research, 2017, 262, 322-334.	3.5	11
216	A multi-criteria sustainability assessment for biodiesel and liquefied natural gas as alternative fuels in transport systems. Journal of Natural Gas Science and Engineering, 2017, 42, 169-186.	2.1	52

#	Article	IF	CITATIONS
217	Sustainable and Integrated Bioenergy Assessment for Latin America, Caribbean and Africa (SIByl-LACAf): The path from feasibility to acceptability. Renewable and Sustainable Energy Reviews, 2017, 76, 292-308.	8.2	9
218	Exploring path dependence, policy interactions, and actor behavior in the German biodiesel supply chain. Applied Energy, 2017, 195, 370-381.	5.1	19
219	Biorefinery site selection using a stepwise biogeophysical and social analysis approach. Biomass and Bioenergy, 2017, 97, 139-148.	2.9	31
220	Multi-period stochastic optimization of a sustainable multi-feedstock second generation bioethanol supply chain â° A logistic case study in Midwestern United States. Land Use Policy, 2017, 61, 420-450.	2.5	87
221	Syntheses of sustainable supply networks with a new composite criterion – Sustainability profit. Computers and Chemical Engineering, 2017, 102, 139-155.	2.0	34
222	Integrated approaches to the optimisation of regional and local food–energy–water systems. Current Opinion in Chemical Engineering, 2017, 18, 38-44.	3.8	14
223	Strategic Supply Chain Planning in Biomass-Based Industries: A Literature Review of Quantitative Models. Economic Complexity and Evolution, 2017, , 259-291.	0.1	2
224	Uncertainties in corn stover feedstock supply logistics cost and life-cycle greenhouse gas emissions for butanol production. Applied Energy, 2017, 208, 1343-1356.	5.1	32
225	Quantitative method to assess the number of jobs created by production systems: Application to multi-criteria decision analysis for sustainable biomass supply chain. Sustainable Production and Consumption, 2017, 12, 134-154.	5.7	14
226	Where to implement local biotech innovations? A framework for multi-scale socio-economic and environmental impact assessment of Green Bio-Refineries. Land Use Policy, 2017, 68, 141-151.	2.5	16
227	A decisional simulation-optimization framework for sustainable facility location of a biodiesel plant in Colombia. Journal of Cleaner Production, 2017, 167, 174-191.	4.6	30
228	A comparison of methodologies for estimating delivered forest residue volume and cost to a wood-based biorefinery. Biomass and Bioenergy, 2017, 106, 83-94.	2.9	26
229	Techno-economic optimization of ethanol synthesis from rice-straw supply chains. Energy, 2017, 141, 2164-2176.	4.5	22
230	Optimal Design and Planning of Glycerol-Based Biorefinery Supply Chains under Uncertainty. Industrial & Design and Planning of Glycerol-Based Biorefinery Supply Chains under Uncertainty.	1.8	18
231	Luque, Yan, You: 2018 Winners of the <i>ACS Sustainable Chemistry &amp; Engineering </i> Lectureship Awards. ACS Sustainable Chemistry and Engineering, 2017, 5, 7450-7450.	3.2	1
232	Biorefineries and the food, energy, water nexus $\hat{a}\in$ " towards a whole systems approach to design and planning. Current Opinion in Chemical Engineering, 2017, 18, 16-22.	3.8	55
233	A framework for ammonia supply chain optimization incorporating conventional and renewable generation. AICHE Journal, 2017, 63, 4390-4402.	1.8	38
234	Nonlinear multi-objective optimization model for a biomass direct-fired power generation supply chain using a case study in China. Energy, 2017, 139, 1066-1079.	4.5	36

#	Article	IF	CITATIONS
235	Consequential Life Cycle Optimization: General Conceptual Framework and Application to Algal Renewable Diesel Production. ACS Sustainable Chemistry and Engineering, 2017, 5, 5887-5911.	3.2	60
236	Uncertain supply chain network design considering carbon footprint and social factors using two-stage approach. Clean Technologies and Environmental Policy, 2017, 19, 2491-2519.	2.1	29
237	Multi-scale sustainability assessments for biomass-based and coal-based fuels in China. Science of the Total Environment, 2017, 599-600, 863-872.	3.9	21
238	Closing loops in agricultural supply chains using multi-objective optimization: A case study of an industrial mushroom supply chain. International Journal of Production Economics, 2017, 183, 409-420.	5.1	147
239	Municipal solid waste to liquid transportation fuels, olefins, and aromatics: Process synthesis and deterministic global optimization. Computers and Chemical Engineering, 2017, 102, 169-187.	2.0	22
240	Stackelberg-game-based modeling and optimization for supply chain design and operations: A mixed integer bilevel programming framework. Computers and Chemical Engineering, 2017, 102, 81-95.	2.0	95
241	Sustainable Food Supply Chain Design. Springer Series in Supply Chain Management, 2017, , 395-412.	0.5	17
242	Sustainable biorefineries, an analysis of practices for incorporating sustainability in biorefinery design. Industrial Crops and Products, 2017, 106, 105-123.	2.5	130
243	Economic evaluation of bio-based supply chains with CO 2 capture and utilisation. Computers and Chemical Engineering, 2017, 102, 213-225.	2.0	23
244	Key challenges and requirements for sustainable and industrialized biorefinery supply chain design and management: A bibliographic analysis. Renewable and Sustainable Energy Reviews, 2017, 69, 350-359.	8.2	116
245	Optimal design and planning of biodiesel supply chain considering non-edible feedstock. Renewable and Sustainable Energy Reviews, 2017, 75, 1089-1100.	8.2	51
246	A review and future directions in techno-economic modeling and optimization of upstream forest biomass to bio-oil supply chains. Renewable and Sustainable Energy Reviews, 2017, 67, 15-35.	8.2	106
247	Optimising Sustainable Supply Chains: A Summarised View of Current and Future Perspectives. Lecture Notes in Logistics, 2017, , 1-11.	0.6	2
248	Process to Planet Approach to Sustainable Process Design: Multiple Objectives and Byproducts. Theoretical Foundations of Chemical Engineering, 2017, 51, 936-948.	0.2	13
249	Optimizing the Wood Value Chain in Northern Norway Taking Into Account National and Regional Economic Trade-Offs. Forests, 2017, 8, 172.	0.9	13
250	Study on the path selection of low-carbon distribution in cold chain based on multi-objective programming. , 2017, , .		0
251	Optimal design for multiple biofuels supply chains. , 2017, , .		0
252	Sustainability Decision Support Framework for the Prioritization of Hydrogen Energy Systems. , 2017, , 225-276.		2

#	Article	IF	CITATIONS
253	Integrated framework for designing spatially explicit biofuel supply chains. Applied Energy, 2018, 216, 116-131.	5.1	47
254	Designing a bio-fuel network considering links reliability and risk-pooling effect in bio-refineries. Reliability Engineering and System Safety, 2018, 174, 96-107.	5.1	17
255	Life cycle environmental and economic analysis of pulverized coal oxy-fuel combustion combining with calcium looping process or chemical looping air separation. Journal of Cleaner Production, 2018, 181, 271-292.	4.6	43
256	Designing an optimised supply network for sustainable conversion of waste agricultural plastics into higher value products. Journal of Cleaner Production, 2018, 189, 683-700.	4.6	34
257	Impact of shelf life on the trade-off between economic and environmental objectives: A dairy case. International Journal of Production Economics, 2018, 201, 136-148.	5.1	9
258	Facilities Location for Residual Biomass Production System Using Geographic Information System under Uncertainty. ACS Sustainable Chemistry and Engineering, 2018, 6, 3331-3348.	3.2	19
259	High-resolution techno–ecological modelling of a bioenergy landscape to identify climate mitigation opportunities in cellulosic ethanol production. Nature Energy, 2018, 3, 211-219.	19.8	53
260	A multistage stochastic programming model for a multi-period strategic expansion of biofuel supply chain under evolving uncertainties. Transportation Research, Part E: Logistics and Transportation Review, 2018, 111, 130-148.	3.7	40
261	Environmentally optimal wood use in Switzerlandâ€"Investigating the relevance of material cascades. Resources, Conservation and Recycling, 2018, 131, 181-191.	5.3	43
263	Addressing global environmental impacts including land use change in life cycle optimization: Studies on biofuels. Journal of Cleaner Production, 2018, 182, 313-330.	4.6	32
264	A Perspective on Challenges and Prospects for Applying Process Systems Engineering Tools to Fermentation-Based Biorefineries. ACS Sustainable Chemistry and Engineering, 2018, 6, 2829-2844.	3.2	10
265	Ecosystems as unit operations for local technoâ€ecological synergy: Integrated process design with treatment wetlands. AICHE Journal, 2018, 64, 2390-2407.	1.8	21
266	Multiobjective optimization for the socio-eco-efficient conversion of lignocellulosic biomass to biofuels and bioproducts. Clean Technologies and Environmental Policy, 2018, 20, 603-620.	2.1	16
267	Methodological approaches to supply chain design. International Journal of Production Research, 2018, 56, 4467-4489.	4.9	26
268	A sustainable aggregate production planning model for the chemical process industry. Computers and Operations Research, 2018, 94, 154-168.	2.4	28
269	Assessing multiple biomass-feedstock in the optimization of power and fuel supply chains for sustainable mobility. Chemical Engineering Research and Design, 2018, 131, 127-143.	2.7	20
270	Manufacturing Ethylene from Wet Shale Gas and Biomass: Comparative Technoeconomic Analysis and Environmental Life Cycle Assessment. Industrial & Environmental Life Cycle Assessment. Industrial & Engineering Chemistry Research, 2018, 57, 5980-5998.	1.8	50
271	Optimization of Multiproduct Biorefinery Processes under Consideration of Biomass Supply Chain Management and Market Developments. Industrial & Engineering Chemistry Research, 2018, 57, 6980-6991.	1.8	33

#	Article	IF	CITATIONS
272	Resilient and sustainable supply chain design: sustainability analysis under disruption risks. International Journal of Production Research, 2018, 56, 5945-5968.	4.9	220
273	Multi-criteria decision analysis framework for sustainable manufacturing in automotive industry. Journal of Cleaner Production, 2018, 187, 257-272.	4.6	103
274	Multi-criteria decision making approaches for green supply chains: a review. Flexible Services and Manufacturing Journal, 2018, 30, 366-396.	1.9	90
275	A proposal for integration of the ecosystem-water-food-land-energy (EWFLE) nexus concept into life cycle assessment: A synthesis matrix system for food security. Journal of Cleaner Production, 2018, 172, 3874-3889.	4.6	99
276	Modelling and optimisation of biomass supply chains: a review. International Journal of Production Research, 2018, 56, 3482-3506.	4.9	89
277	Optimization of biofuels production via a water–energy–food nexus framework. Clean Technologies and Environmental Policy, 2018, 20, 1443-1466.	2.1	44
278	Opportunities and challenges in sustainable supply chain: An operations research perspective. European Journal of Operational Research, 2018, 268, 399-431.	3.5	262
279	A two-stage chance-constrained stochastic programming model for a bio-fuel supply chain network. International Journal of Production Economics, 2018, 195, 27-44.	5.1	83
280	Developing a cellulosic aviation biofuel industry in Indiana: A market and logistics analysis. Energy, 2018, 142, 793-802.	4.5	15
281	Modelling different types of uncertainty in biofuel supply network design and planning: A robust optimization approach. Renewable Energy, 2018, 116, 500-517.	4.3	139
282	A goal programming model for a sustainable biomass supply chain network. International Journal of Energy Sector Management, 2018, 12, 79-102.	1.2	15
283	Analysing the factors that influence the Pareto frontier of a biâ€objective supply chain design problem. International Transactions in Operational Research, 2018, 25, 1717-1738.	1.8	5
284	Environmental impact assessment of chicken meat production via an integrated methodology based on LCA, simulation and genetic algorithms. Journal of Cleaner Production, 2018, 174, 477-491.	4.6	41
285	Multicriteria Environmental and Economic Analysis of Municipal Solid Waste Incineration Power Plant with Carbon Capture and Separation from the Life-Cycle Perspective. ACS Sustainable Chemistry and Engineering, 2018, 6, 937-956.	3.2	52
286	A new superstructure optimization paradigm for process synthesis with product distribution optimization: Application to an integrated shale gas processing and chemical manufacturing process. AICHE Journal, 2018, 64, 123-143.	1.8	50
287	A Multi-Criteria Decision Analysis Approach to Facility Siting in a Wood-Based Depot-and-Biorefinery Supply Chain Model. Frontiers in Energy Research, 2018, 6, .	1.2	18
288	Network Design towards Sustainability of Chinese Baijiu Industry from a Supply Chain Perspective. Discrete Dynamics in Nature and Society, 2018, 2018, 1-19.	0.5	5
289	Biomass Supply Chain Design, Planning and Management: A Review of Literature. , 2018, , .		8

#	Article	IF	CITATIONS
290	Towards practical application of gasification: a critical review from syngas and biochar perspectives. Critical Reviews in Environmental Science and Technology, 2018, 48, 1165-1213.	6.6	64
291	Modeling and Simulation of Energy Systems: A Review. Processes, 2018, 6, 238.	1.3	99
292	A multi-stage stochastic program for the sustainable design of biofuel supply chain networks under biomass supply uncertainty and disruption risk: A real-life case study. Transportation Research, Part E: Logistics and Transportation Review, 2018, 118, 534-567.	3.7	116
293	Selecting new product designs and processing technologies under uncertainty: Two-stage stochastic model and application to a food supply chain. International Journal of Production Economics, 2018, 201, 89-101.	5.1	17
294	Strategic spatial and temporal design of renewable diesel and biojet fuel supply chains: Case study of California, USA. Energy, 2018, 156, 181-195.	4.5	10
295	Sustainability Assessment of Biodiesel Supply Chain from Various Biomasses and Conversion Technologies. BioPhysical Economics and Resource Quality, 2018, 3, 1.	2.4	20
296	Supply Chain Mixed Integer Linear Program Model Integrating a Biorefining Technology Superstructure. Industrial & Engineering Chemistry Research, 2018, 57, 9849-9865.	1.8	10
297	Framing policy on low emissions vehicles in terms of economic gains: Might the most straightforward gain be delivered by supply chain activity to support refuelling?. Energy Policy, 2018, 119, 528-534.	4.2	7
298	Robust Optimization Method to Green Biomass-to-Bioenergy Systems under Deep Uncertainty. Industrial & Deep Uncertainty. Research, 2018, 57, 7975-7986.	1.8	15
299	A Synthesis of Optimization Approaches for LCA-Integrated Industrial Process Modeling: Application to Potable Water Production Plants. , 2018, , 21-31.		0
300	A stochastic technoâ€economic analysis of shrub willow production using EcoWillow 3.0S. Biofuels, Bioproducts and Biorefining, 2018, 12, 846-856.	1.9	15
301	Product design: Impact of government policy and consumer preference on company profit and corporate social responsibility. Computers and Chemical Engineering, 2018, 118, 118-131.	2.0	17
302	Including Ecosystem Services in Sustainable Process Design across Multiple Spatial Scales. Computer Aided Chemical Engineering, 2018, 44, 1837-1842.	0.3	5
303	An Assessment of the Sustainability of Lignocellulosic Bioethanol Production from Wastes in Iceland. Energies, 2018, 11, 1493.	1.6	44
304	Designing a Reliable and Congested Multi-Modal Facility Location Problem for Biofuel Supply Chain Network. Energies, 2018, 11, 1682.	1.6	18
305	Bridging the Gaps for a â€~Circular' Bioeconomy: Selection Criteria, Bio-Based Value Chain and Stakeholder Mapping. Sustainability, 2018, 10, 1695.	1.6	64
306	Future directions in process and product synthesis and design. Computer Aided Chemical Engineering, 2018, 44, 1-10.	0.3	6
307	Biomass feedstock supply chain design $\hat{a}\in$ a taxonomic review and a decomposition-based methodology. International Journal of Production Research, 2018, 56, 5626-5659.	4.9	26

#	Article	IF	CITATIONS
308	Low-Moisture Switchgrass Bulk-Format Logistics Costs Based on Engineering Data. Transactions of the ASABE, 2018, 61, 341-354.	1.1	3
309	Towards a comprehensive model of a biofuel supply chain optimization from coffee crop residues. Transportation Research, Part E: Logistics and Transportation Review, 2018, 116, 136-162.	3.7	40
310	Locating a Biorefinery in Northern Spain: Decision Making and Economic Consequences. Socio-Economic Planning Sciences, 2019, 66, 82-91.	2.5	5
311	Synthesis of biogas supply networks using various biomass and manure types. Computers and Chemical Engineering, 2019, 122, 129-151.	2.0	23
312	A multi-criteria decision support tool for biorefinery siting: Using economic, environmental, and social metrics for a refined siting analysis. Biomass and Bioenergy, 2019, 128, 105330.	2.9	32
313	Optimal Design of Bioenergy Supply Chains Considering Social Benefits: A Case Study in Northeast China. Processes, 2019, 7, 437.	1.3	6
314	Linear estimators of biomass yield maps for improved biomass supply chain optimisation. Applied Energy, 2019, 253, 113526.	5.1	16
315	Economic Assessment of Biofuels. , 2019, , 95-121.		3
316	Integrated Sustainability Assessment of Biofuels. , 2019, , 197-214.		3
317	Economic and Environmental Optimization of the Forest Supply Chain for Timber and Bioenergy Production from Beetle-Killed Forests in Northern Colorado. Forests, 2019, 10, 689.	0.9	12
318	A model-based approach for biomass-to-bioproducts supply Chain network planning optimization. Food and Bioproducts Processing, 2019, 118, 293-305.	1.8	17
319	Sustainable Design of Energy Systems by Integrating Life Cycle Optimization With Superstructure Optimization. Computer Aided Chemical Engineering, 2019, 47, 211-220.	0.3	1
320	Sustainable Process Intensification Using Building Blocks. Computer Aided Chemical Engineering, 2019, 47, 157-162.	0.3	2
321	Prioritization of Bioethanol Production Systems from Agricultural and Waste Agricultural Biomass Using Multi-criteria Decision Making. BioPhysical Economics and Resource Quality, 2019, 4, 1.	2.4	19
322	Decision-Making for Sustainability Enhancement of Chemical Systems under Uncertainties: Combining the Vector-Based Multiattribute Decision-Making Method with Weighted Multiobjective Optimization Technique. Industrial & Decision-Making Research, 2019, 58, 12066-12079.	1.8	10
323	Challenges and future directions for process and product synthesis and design. Computers and Chemical Engineering, 2019, 128, 421-436.	2.0	24
324	Multi-objective mathematical modeling for sustainable supply chain management in the paper industry. Computers and Industrial Engineering, 2019, 135, 1092-1102.	3.4	53
325	A spatiotemporal assessment of field residues of rice, maize, and wheat at provincial and county levels in China. GCB Bioenergy, 2019, 11, 1146-1158.	2.5	8

#	Article	IF	CITATIONS
326	Designing biofuel supply chains while mitigating harmful algal blooms with treatment wetlands. Computers and Chemical Engineering, 2019, 126, 113-127.	2.0	23
327	Extending the supply chain to address sustainability. Journal of Cleaner Production, 2019, 229, 652-666.	4.6	102
328	Sequential Use of Geographic Information System and Mathematical Programming for Optimal Planning for Energy Production Systems from Residual Biomass. Industrial & Engineering Chemistry Research, 2019, 58, 15818-15837.	1.8	17
329	Toward Sustainable Chemical Engineering: The Role of Process Systems Engineering. Annual Review of Chemical and Biomolecular Engineering, 2019, 10, 265-288.	3.3	37
330	Identifying trade-offs between socio-economic and environmental factors for bioenergy crop production: A case study from northern Kentucky. Renewable Energy, 2019, 142, 272-283.	4.3	13
331	Supply chain of renewable energy: A bibliometric review approach. Biomass and Bioenergy, 2019, 126, 70-83.	2.9	46
332	Quantum computing for energy systems optimization: Challenges and opportunities. Energy, 2019, 179, 76-89.	4.5	114
333	Biomass Conversion into Fuels, Chemicals, or Electricity? A Network-Based Life Cycle Optimization Approach Applied to the European Union. ACS Sustainable Chemistry and Engineering, 2019, 7, 10570-10582.	3.2	45
334	Moving second generation biofuel manufacturing forward: Investigating economic viability and environmental sustainability considering two strategies for supply chain restructuring. Applied Energy, 2019, 242, 1467-1496.	5.1	39
335	Grand Research Challenges for Sustainable Industrial Biotechnology. Trends in Biotechnology, 2019, 37, 1042-1050.	4.9	94
336	Considering agricultural wastes and ecosystem services in Food-Energy-Water-Waste Nexus system design. Journal of Cleaner Production, 2019, 228, 941-955.	4.6	65
337	Systems analysis, design, and optimization of geothermal energy systems for power production and polygeneration: State-of-the-art and future challenges. Renewable and Sustainable Energy Reviews, 2019, 109, 551-577.	8.2	70
338	Strategic planning of supply chains considering extreme events: Novel heuristic and application to the petrochemical industry. Computers and Chemical Engineering, 2019, 125, 306-323.	2.0	16
339	Multiobjective optimization for the design of phase III biorefinery sustainable supply chain. Journal of Cleaner Production, 2019, 223, 189-213.	4.6	18
340	Sustainable olefin supply chain network design under seasonal feedstock supplies and uncertain carbon tax rate. Journal of Cleaner Production, 2019, 222, 280-299.	4.6	34
341	Energy conversion vs structural products: A novel multi-objective multi-period linear optimisation with application to the Australian hardwood plantation thinned logs. Journal of Cleaner Production, 2019, 224, 614-625.	4.6	4
342	Economic, social, and environmental cost optimization of biomass transportation: a regional model for transportation analysis in plant location process. Biofuels, Bioproducts and Biorefining, 2019, 13, 582-598.	1.9	12
344	Synergistic bio-oil production from hydrothermal co-liquefaction of Spirulina platensis and α-Cellulose. Energy, 2019, 174, 1283-1291.	4.5	31

#	Article	IF	CITATIONS
345	Optimal Planning and Site Selection for Distributed Multiproduct Biorefineries Involving Economic, Environmental, and Social Objectives., 2019,, 29-77.		0
346	Using a Product's Sustainability Space as a Design Exploration Tool. Design Science, 2019, 5, .	1.1	24
347	High-resolution multi-objective optimization of feedstock landscape design for hybrid first and second generation biorefineries. Applied Energy, 2019, 238, 1484-1496.	5.1	19
348	Towards a holistic approach for multi-objective optimization of food processes: A critical review. Trends in Food Science and Technology, 2019, 86, 1-15.	7.8	37
349	Integrated scheduling of a hybrid manufacturing and recovering system in a multi-product multi-stage environment with carbon emission. Journal of Cleaner Production, 2019, 222, 695-709.	4.6	11
350	Asset fixity and economic competitiveness of US ethanol production. Biomass and Bioenergy, 2019, 122, 37-44.	2.9	4
351	Review of Sustainability Assessment Approaches Based on Life Cycles. Sustainability, 2019, 11, 5717.	1.6	64
352	Novel Approach for Weighting in the Geographic Information System Focused on a Multistakeholder Problem: Case for the Residual Biomass Processing System. Industrial & Engineering Chemistry Research, 2019, 58, 23249-23260.	1.8	5
353	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
354	A Multi-Objective Multi-Technology (MOMT) Evaluation and Analysis Framework for Ammonia Synthesis Process Development. Computer Aided Chemical Engineering, 2019, , 415-420.	0.3	3
355	Resilient supply chain design and operations with decisionâ€dependent uncertainty using a dataâ€driven robust optimization approach. AICHE Journal, 2019, 65, 1006-1021.	1.8	55
356	Methods for designing and assessing biorefineries: Review. Biofuels, Bioproducts and Biorefining, 2019, 13, 789-808.	1.9	42
357	Green supply chain network design: A review focused on policy adoption and emission quantification. International Journal of Production Economics, 2019, 208, 305-318.	5.1	128
358	Economic Risk Analysis and Critical Comparison of Biodiesel Production Systems. Biofuel and Biorefinery Technologies, 2019, , 127-148.	0.1	2
359	China's roadmap to low-carbon electricity and water: Disentangling greenhouse gas (GHG) emissions from electricity-water nexus via renewable wind and solar power generation, and carbon capture and storage. Applied Energy, 2019, 235, 31-42.	5.1	60
360	Sustainable supply chain network design for the optimal utilization of municipal solid waste. AICHE Journal, 2019, 65, e16464.	1.8	14
361	Green Network Design Problems. , 2019, , 169-206.		5
362	The multi-scale challenges of biomass fast pyrolysis and bio-oil upgrading: Review of the state of art and future research directions. Progress in Energy and Combustion Science, 2019, 71, 1-80.	15.8	316

#	Article	IF	CITATIONS
363	Coupling economic models and environmental assessment methods to support regional policies: A critical review. Journal of Cleaner Production, 2019, 216, 408-421.	4.6	52
364	Optimization of lignocellulosic biomass-to-biofuel supply chains with mobile pelleting. Transportation Research, Part E: Logistics and Transportation Review, 2019, 122, 545-562.	3.7	34
365	A global bioenergy supply network redesign through integrating transfer pricing under uncertain condition. Journal of Cleaner Production, 2019, 208, 1081-1095.	4.6	30
366	Biodiesel Supply Chain Optimization Modeled with Geographical Information System (GIS) and Mixed-Integer Linear Programming (MILP) for the Northern Great Plains Region. Bioenergy Research, 2019, 12, 229-240.	2.2	26
367	Bio-Electro-Refinery. , 2019, , 1059-1085.		1
368	Conceptual design of a lignocellulosic biorefinery and its supply chain for ethanol production in India. Computers and Chemical Engineering, 2019, 121, 696-721.	2.0	19
369	Role of biomass supply chain management in sustainable bioenergy production. Biofuels, 2019, 10, 109-119.	1.4	16
370	Identifying trade-offs between sustainability dimensions in the supply chain of biodiesel in Colombia. Computers and Electronics in Agriculture, 2019, 161, 162-169.	3.7	25
371	Managing congestion in a multi-modal transportation network under biomass supply uncertainty. Annals of Operations Research, 2019, 273, 739-781.	2.6	14
372	Modeling and solving the multi-period disruptions scheduling problem on urban networks. Annals of Operations Research, 2020, 285, 427-443.	2.6	14
373	Sustainability-based optimization algorithm. International Journal of Environmental Science and Technology, 2020, 17, 1537-1550.	1.8	11
374	Key issue, challenges, and status quo of models for biofuel supply chain design. , 2020, , 273-315.		7
375	Systematic MultiObjective Life Cycle Optimization Tools Applied to the Design of Sustainable Chemical Processes., 2020,, 435-449.		3
376	Flaws in the interpretation phase of bioenergy LCA fuel the debate and mislead policymakers. International Journal of Life Cycle Assessment, 2020, 25, 17-35.	2.2	34
377	A Performance Assessment Framework for Baijiu Sustainable Supply Chain in China. Advances in Intelligent Systems and Computing, 2020, , 402-414.	0.5	1
378	A multi-layered view of chemical and biochemical engineering. Chemical Engineering Research and Design, 2020, 155, A133-A145.	2.7	58
379	Optimal design for sustainable bioethanol supply chain considering the bioethanol production strategies: A case study. Computers and Chemical Engineering, 2020, 134, 106720.	2.0	22
380	Challenges in the design of formulated products: multiscale process and product design. Current Opinion in Chemical Engineering, 2020, 27, 1-9.	3.8	24

#	Article	IF	CITATIONS
381	Sustainable design of geothermal energy systems for electric power generation using life cycle optimization. AICHE Journal, 2020, 66, e16898.	1.8	21
382	Economic viability and environmental impact investigation for the biofuel supply chain using co-fermentation technology. Applied Energy, 2020, 259, 114235.	5.1	22
383	Development and applicability of life cycle impact assessment methodologies., 2020,, 95-124.		13
384	Input-output modeling analysis with a detailed disaggregation of energy sectors for climate change policy-making: A case study of Saskatchewan, Canada. Renewable Energy, 2020, 151, 1307-1317.	4.3	28
385	Biomass supply chain environmental and socio-economic analysis: 40-Years comprehensive review of methods, decision issues, sustainability challenges, and the way forward. Biomass and Bioenergy, 2020, 142, 105777.	2.9	79
386	Novel resilient-sustainable strategies for second-generation biofuel network design considering Neem and Eruca Sativa under hybrid stochastic fuzzy robust approach. Computers and Chemical Engineering, 2020, 143, 107073.	2.0	27
387	Frontiers of sustainable manufacturing: Hybridization and modularization., 2020,, 311-328.		1
388	Hybrid processes for sustainable chemicals production from shale gas and ethanol. , 2020, , 355-378.		1
389	Sustainable Process Intensification Using Building Blocks. ACS Sustainable Chemistry and Engineering, 2020, 8, 17664-17679.	3.2	24
390	Quantifying the community capitals framework: Strategic application of the community assets and attributes model. Community Development, 2020, 51, 535-555.	0.5	17
391	Economic Evaluation of Large-Scale Biorefinery Deployment: A Framework Integrating Dynamic Biomass Market and Techno-Economic Models. Sustainability, 2020, 12, 7126.	1.6	42
393	Carbon-Efficient Production Scheduling of a Bioethanol Plant Considering Diversified Feedstock Pelletization Density: A Case Study. Processes, 2020, 8, 1189.	1.3	1
394	Comparison between Different Hybrid Life Cycle Assessment Methodologies: A Review and Case Study of Biomass-based <i>p</i> -Xylene Production. Industrial & Engineering Chemistry Research, 2020, 59, 22313-22329.	1.8	14
395	Synthesis of European Union Biorefinery Supply Networks Considering Sustainability Objectives. Processes, 2020, 8, 1588.	1.3	10
396	Life Cycle Assessment for the Design of Chemical Processes, Products, and Supply Chains. Annual Review of Chemical and Biomolecular Engineering, 2020, 11, 203-233.	3.3	44
397	Two decades of eco-efficiency research: a bibliometric analysis. Environmental Sustainability, 2020, 3, 155-168.	1.4	7
398	Sustainable capacitated facility location/network design problem: a Non-dominated Sorting Genetic Algorithm based multiobjective approach. Annals of Operations Research, 2022, 311, 821-852.	2.6	13
399	A Review on Water-Energy-Greenhouse Gas Nexus of the Bioenergy Supply and Production System. Current Sustainable/Renewable Energy Reports, 2020, 7, 28-39.	1.2	18

#	Article	IF	CITATIONS
400	Distributionally robust chance constrained programming with generative adversarial networks (GANs). AICHE Journal, 2020, 66, e16963.	1.8	16
401	A Review on Optimization Methods for Biomass Supply Chain: Models and Algorithms, Sustainable Issues, and Challenges and Opportunities. Process Integration and Optimization for Sustainability, 2020, 4, 203-226.	1.4	31
402	Poultry Waste Valorization via Pyrolysis Technologies: Economic and Environmental Life Cycle Optimization for Sustainable Bioenergy Systems. ACS Sustainable Chemistry and Engineering, 2020, 8, 4633-4646.	3.2	34
403	Optimal design of the second and third generation biofuel supply network by a multi-objective model. Journal of Cleaner Production, 2020, 256, 120355.	4.6	40
404	How to quantify social impacts in strategic supply chain optimization: State of the art. Journal of Cleaner Production, 2020, 257, 120459.	4.6	15
405	Optimization of biogas supply networks considering multiple objectives and auction trading prices of electricity. BMC Chemical Engineering, 2020, 2, .	3.4	14
406	An AHP-based multi-criteria model for sustainable supply chain development in the renewable energy sector. Expert Systems With Applications, 2020, 150, 113321.	4.4	128
407	Industrial system prioritization using the sustainabilityâ€intervalâ€index conceptual framework with lifeâ€cycle considerations. AICHE Journal, 2020, 66, e16961.	1.8	7
408	Optimization of harvest and logistics for multiple lignocellulosic biomass feedstocks in the northeastern United States. Energy, 2020, 197, 117260.	4.5	32
409	Uncertainty Analysis in Life Cycle Assessments Applied to Biorefineries Systems: A Critical Review of the Literature. Process Integration and Optimization for Sustainability, 2020, 4, 1-13.	1.4	14
410	Residues and bio-energy generation: A case study modelling value chain optimisation in Tasmania. Energy, 2020, 196, 117007.	4.5	3
411	Sustainable Liquefied Natural Gas Supply Chain Management: A Review of Quantitative Models. Sustainability, 2020, 12, 243.	1.6	19
412	A sustainable biomass network design model for bioenergy production by anaerobic digestion technology: using agricultural residues and livestock manure. Energy, Sustainability and Society, 2020, 10, .	1.7	34
413	Multiscale modeling approaches for waste biorefinery. , 2020, , 425-453.		0
414	The effect of environmental and social value objectives on optimal design in industrial energy symbiosis: A multi-objective approach. Resources, Conservation and Recycling, 2020, 158, 104825.	5.3	31
415	Supply Chain Network Carbon Footprint of Forest Biomass to Biorefinery. Journal of Sustainable Forestry, 2021, 40, 124-141.	0.6	8
416	Multiobjective recordâ€toâ€record travel metaheuristic method for solving forest supply chain management problems with economic and environmental objectives. Natural Resource Modelling, 2021, 34, .	0.8	8
417	Comparative assessment of bioethanol supply chain: insights from Iran. Biofuels, 2021, 12, 475-483.	1.4	10

#	Article	IF	CITATIONS
418	Environmental benefits of largeâ€scale secondâ€generation bioethanol production in the EU: An integrated supply chain network optimization and life cycle assessment approach. Journal of Industrial Ecology, 2021, 25, 677-692.	2.8	8
419	Techno-economic analysis for biomass supply chain: A state-of-the-art review. Renewable and Sustainable Energy Reviews, 2021, 135, 110164.	8.2	80
420	Comprehensive study on the catalytic methods for furyl alkane synthesis: A promising biodiesel precursor. Renewable and Sustainable Energy Reviews, 2021, 135, 110218.	8.2	7
421	Modeling and economic optimization of cellulosic biofuel supply chain considering multiple conversion pathways. Applied Energy, 2021, 281, 116059.	5.1	24
422	Optimization of lignocellulosic biomass-to-biofuel supply chains with densification: Literature review. Biomass and Bioenergy, 2021, 144, 105888.	2.9	46
423	A two-phase sequential approach to design bioenergy supply chains under uncertainty and social concerns. Computers and Chemical Engineering, 2021, 145, 107131.	2.0	21
424	The technological innovation of hybrid and plug-in electric vehicles for environment carbon pollution control. Environmental Impact Assessment Review, 2021, 86, 106506.	4.4	97
425	A biobjective chance constrained optimization model to evaluate the economic and environmental impacts of biopower supply chains. Annals of Operations Research, 2021, 296, 95-130.	2.6	11
426	Sustainability concepts in biofuel supply chain. , 2021, , 95-126.		0
427	An indicator-based approach to sustainable management of natural resources. , 2021, , 255-280.		0
428	Multiobjective Optimization of Sustainable WCO for Biodiesel Supply Chain Network Design. Discrete Dynamics in Nature and Society, 2021, 2021, 1-16.	0.5	15
429	Evaluation of Road Infrastructure Projects: A Life Cycle Sustainability-Based Decision-Making Approach. Sustainability, 2021, 13, 3743.	1.6	13
430	Optimization Design of a Supply Chain for Jatropha-Based Biofuel from a Sustainable Development Perspective Considering International Resources and Demand: A Case Study. Industrial & Engineering Chemistry Research, 2021, 60, 6188-6207.	1.8	12
431	Perspectives for Greening European Fossil-Fuel Infrastructures Through Use of Biomass: The Case of Liquid Biofuels Based on Lignocellulosic Resources. Frontiers in Energy Research, 2021, 9, .	1.2	11
432	A framework for the design and analysis of integrated multi-product biorefineries from agricultural and forestry wastes. Renewable and Sustainable Energy Reviews, 2021, 139, 110687.	8.2	62
433	Process systems engineering – The generation next?. Computers and Chemical Engineering, 2021, 147, 107252.	2.0	128
434	Dynamic simulation driven design and management of production facilities in agricultural/food industry. Acta Horticulturae, 2021, , 241-248.	0.1	3
435	Multi-objective optimization of CCUS supply chains for European countries with higher carbon dioxide emissions. ChemistrySelect, 2023, 8, 1593-1620.	0.7	1

#	Article	IF	CITATIONS
436	Recent progress of scientific research on life cycle assessment. Materials Today: Proceedings, 2021, 47, 3161-3170.	0.9	6
437	Multiobjective Optimization of Mixed-Integer Linear Programming Problems: A Multiparametric Optimization Approach. Industrial & Engineering Chemistry Research, 2021, 60, 8493-8503.	1.8	8
438	Designing industrial landscapes for mitigating air pollution with ⟨scp⟩spatiallyâ€explicit technoâ€ecological⟨/scp⟩ synergy. AICHE Journal, 2021, 67, e17347.	1.8	5
439	Optimization models for integrated biorefinery operations. Optimization Letters, 2022, 16, 909-951.	0.9	2
440	Multi-Objective Optimization to Support the Design of a Sustainable Supply Chain for the Generation of Biofuels from Forest Waste. Sustainability, 2021, 13, 7774.	1.6	10
441	Modeling and Optimization Sustainable Forest Supply Chain Considering Discount in Transportation System and Supplier Selection under Uncertainty. Forests, 2021, 12, 964.	0.9	33
442	Efficient and sustainable closed-loop supply chain network design: A two-stage stochastic formulation with a hybrid solution methodology. Journal of Cleaner Production, 2021, 308, 127323.	4.6	26
443	Renewable energy in sustainable supply chain: A review. Revista Facultad De IngenierÃa, 0, , .	0.5	1
444	An optimization approach for sustainable and resilient supply chain design with regional considerations. Computers and Industrial Engineering, 2021, 159, 107510.	3.4	34
445	Designing a Closed-loop Supply Chain Network Considering Social Factors; A Case Study on Avocado Industry. Applied Mathematical Modelling, 2022, 101, 600-631.	2.2	65
446	Sustainable Design of an Optimal Supply Chain for Furfural Production from Agricultural Wastes. Industrial & Design of an Optimal Supply Chain for Furfural Production from Agricultural Wastes.	1.8	3
447	Designing and planning of Ethiopia's biomass-to-biofuel supply chain through integrated strategic-tactical optimization model considering economic dimension. Computers and Chemical Engineering, 2021, 153, 107425.	2.0	11
448	Importing participatory practices of the socio-environmental systems community to the process system engineering community: An application to supply chain. Computers and Chemical Engineering, 2021, 155, 107530.	2.0	5
449	Process design within planetary boundaries: Application to CO2 based methanol production. Chemical Engineering Science, 2021, 246, 116891.	1.9	20
450	Stochastic techno-economic evaluation model for biomass supply chain: A biomass gasification case study with supply chain uncertainties. Renewable and Sustainable Energy Reviews, 2021, 152, 111644.	8.2	23
451	Designing biomass supply chains within planetary boundaries. AICHE Journal, 2021, 67, e17131.	1.8	15
452	Sustainable supply chain network design using products $\hat{a} \in \mathbb{N}$ life cycle in the aluminum industry. Environmental Science and Pollution Research, 2021, , 1.	2.7	67
453	A systematic literature review of quantitative models for sustainable supply chain management. Mathematical Biosciences and Engineering, 2021, 18, 2206-2229.	1.0	12

#	ARTICLE	IF	CITATIONS
454	Sustainable Business Models and Artificial Intelligence: Opportunities and Challenges. Contributions To Management Science, 2020, , 103-117.	0.4	17
455	Economic and Land-Use Optimization of Lignocellulosic-Based Bioethanol Supply Chains Under Stochastic Environment. Energy Systems, 2015, , 219-251.	0.5	1
456	Biofuel Supply Chain Network Design and Operations. Springer Series in Supply Chain Management, 2016, , 143-162.	0.5	9
457	Visual Access to Optimization Problems in Strategic Environmental Assessment. Lecture Notes in Computer Science, 2013, , 361-372.	1.0	4
458	Optimal Superstructure-Based Design and Synthesis of Hydrocarbon Biorefinery via Fast Pyrolysis, Hydrogen Production and Hydroprocessing Pathway. Computer Aided Chemical Engineering, 2014, 33, 175-180.	0.3	3
459	Life-cycle assessment of alternative liquid fuels production in China. Energy, 2017, 139, 507-522.	4.5	42
460	Life-Cycle Assessment of Bioethanol from Pine Residues via Indirect Biomass Gasification to Mixed Alcohols*. Forest Products Journal, 2012, 62, 314-325.	0.2	23
461	AHP -based Risk Assessment of Chemical Supply Chain. , 2014, , .		1
464	Assessing the Uses of NLP-based Surrogate Models for Solving Expensive Multi-Objective Optimization Problems: Application to Potable Water Chains., 0, , .		1
465	A CRITICAL TAXONOMY OF SOCIO-ECONOMIC STUDIES AROUND BIOMASS AND BIO-WASTE TO ENERGY PROJECTS. Detritus, 2018, In Press, 1.	0.4	5
466	A paradigm shift in sustainability: from lines to circles. Acta Innovations, 2020, , 5-16.	0.4	44
467	Coupling Multi-objective Constrained Optimization, Life Cycle Assessment, and Detailed Process Simulation for Potable Water Treatment Chains. Journal of Environmental Accounting and Management, 2015, 3, 217-227.	0.3	4
468	Development of an ecodesign framework for food manufacturing including process flowsheeting and multiple-criteria decision-making: Application to milk evaporation. Food and Bioproducts Processing, 2022, 131, 40-59.	1.8	10
469	Incorporating Environmental Perspective in Integrated Strategic-Tactical Economic Optimization Model of Biomass-to-Biofuel Supply Chain—A Real Case Study in Ethiopia. Processes, 2021, 9, 1879.	1.3	0
471	A robust optimization approach for designing an environmentally conscious supply chain with consideration of customerâ€specific environmental product requirements., 2014, , 185-205.		1
472	La sostenibilidad en el diseñ0 de cadenas de suministro de biocombustibles. Revista IngenierÃas Universidad De MedellÃn, 2015, 14, 57-72.	0.1	0
473	Integrated Hybrid Life Cycle Optimization with Application to Sustainable Design of A UK Advanced Biofuel Supply Chain. Computer Aided Chemical Engineering, 2016, 38, 2295-2300.	0.3	0
474	A Composite-Curve-Based Biomass Procurement Planning Approach. , 2017, , 749-770.		0

#	Article	IF	Citations
475	Efficient Design of Biomass-Based Supply Chains: A Key Component of a Sustainable Energy System. , $2017, 713-747$ .		O
476	The Effect of Environmental Criteria on Locating a Biorefinery: A Green Facility Location Problem. Decision Making in Manufacturing and Services, 2017, 11, 19.	0.2	0
478	Designing a sustainable biofuel supply chain by considering carbon policies: a case study in Iran. Energy, Sustainability and Society, 2021, $11$ , .	1.7	11
479	Optimal Design of the Biofuel Supply Chain Utilizing Multiple Feedstocks: A Korean Case Study. ACS Sustainable Chemistry and Engineering, 2021, 9, 14690-14703.	3.2	8
480	Digital twin driven design evaluation. , 2020, , 139-164.		2
481	A system dynamics approach to analysing bioethanol and biodiesel supply chains: increasing bioethanol and biodiesel market shares in the USA. International Journal of Energy Technology and Policy, 2020, 16, 57.	0.1	O
482	Techno-economic analysis in the green mobility sector: A guideline for method selection. , 2021, , .		0
483	Supply chain and environmental assessment of the essential oil production using Calendula (Calendula Officinalis) as raw material. Heliyon, 2020, 6, e05606.	1.4	2
484	Marginalization index as social measure for Acetone-Butanol-Ethanol supply chain planning. Renewable and Sustainable Energy Reviews, 2022, 154, 111816.	8.2	3
485	Building an agent-based techno-economic assessment coupled with life cycle assessment of biomass to methanol supply chains. Applied Energy, 2022, 309, 118449.	5.1	18
486	The Sustainable Supply Chain: Concepts, Optimization and Simulation Models, and Trends. IngenierÃe, 2020, 25, 355-377.	0.1	4
487	SPECIFICATION OF LOGISTIC CHAIN SUSTAINABILITY: ENVIRONMENTAL, SOCIAL AND ECONOMIC ISSUES. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLIV-4/W3-2020, 241-248.	0.2	0
488	Addressing scale and seasonality in the design of sugarcane to ethylene glycol biorefineries. Journal of Cleaner Production, 2022, 337, 130585.	4.6	2
489	Effects of government subsidy programs on job creation for sustainable supply chain management. Socio-Economic Planning Sciences, 2022, 82, 101261.	2.5	2
490	Economic optimization for a dualâ€feedstock lignocellulosicâ€based sustainable biofuel supply chain considering greenhouse gas emission and soil carbon stock. Biofuels, Bioproducts and Biorefining, 2022, 16, 653-670.	1.9	6
491	Integrated spatially explicit landscape and cellulosic biofuel supply chain optimization under biomass yield uncertainty. Computers and Chemical Engineering, 2022, 160, 107724.	2.0	12
492	Multi-Period Deterministic Model of Sustainable Integrated of Hybrid First and Second Generation Bioethanol Supply Chains for Synthesis and Renovation. Heat and Mass Transfer, 2022, , 45-99.	0.2	1
493	Carbon-Negative Food Waste-Derived Bioethanol: A Hybrid Model of Life Cycle Assessment and Optimization. ACS Sustainable Chemistry and Engineering, 2022, 10, 4512-4521.	3.2	6

#	Article	IF	CITATIONS
494	Liquid air as an emerging energy vector towards carbon neutrality: A multi-scale systems perspective. Renewable and Sustainable Energy Reviews, 2022, 159, 112201.	8.2	22
495	A taxonomic review and analysis on biomass supply chain design and planning: New trends, methodologies and applications. Industrial Crops and Products, 2022, 180, 114747.	2.5	16
496	An innovative sustainability-oriented multi-criteria decision making framework for prioritization of industrial systems with interdependent factors: Method and a case study of electricity generation. Environmental Impact Assessment Review, 2022, 95, 106776.	4.4	7
497	Multi-Objective Optimization for Sustainable Supply Chain and Logistics: A Review. Sustainability, 2021, 13, 13617.	1.6	18
501	Incorporating social benefits in optimal design of bioethanol supply chains: a case study in China. Production and Manufacturing Research, 2022, 10, 176-197.	0.9	0
502	Logistics and Supply Chain Modelling for the Biobased Economy: A Systematic Literature Review and Research Agenda. Frontiers in Chemical Engineering, 2022, 4, .	1.3	0
503	Toward a Sustainable Municipal Solid Waste Incineration Fly-Ash Utilization Network: Integrating Hybrid Life Cycle Assessment with Multiobjective Optimization. ACS Sustainable Chemistry and Engineering, 2022, 10, 7635-7647.	3.2	5
504	Industry 4.0 enabling sustainable supply chain development in the renewable energy sector: A multi-criteria intelligent approach. Technological Forecasting and Social Change, 2022, 182, 121813.	6.2	29
505	A brief literature review of quantitative models for sustainable supply chain management. , 2022, , 301-329.		0
506	Sustainable supply chain management and green technologies: a bibliometric review of literature. Environmental Science and Pollution Research, 2022, 29, 58454-58470.	2.7	27
507	Optimal Conversion of Organic Wastes to Value-Added Products: Toward a Sustainable Integrated Biorefinery in Denmark. Frontiers in Chemical Engineering, 0, 4, .	1.3	4
508	A robust optimization approach for an integrated hybrid biodiesel and biomethane supply chain network design under uncertainty: case study. International Journal of Energy and Environmental Engineering, 2023, 14, 189-210.	1.3	5
509	The socioeconomic contribution of the recreational fishery based on input–output analysis: The case of China. Marine Policy, 2022, 143, 105177.	1.5	8
510	Towards Efficient Bioenergy Systems: Understanding the Role of Soil Sequestration, Supply Chain Design, and Carbon Capture. Computer Aided Chemical Engineering, 2022, , 913-918.	0.3	0
511	Multi-objective programming for designing sustainable biogas supply chain: a case study in North Dakota, USA. Journal of Business Analytics, 0, , 1-13.	1.8	0
512	The Emergence of a Sustainable and Reliable Supply Chain Paradigm in Supply Chain Network Design. Complexity, 2022, 2022, 1-29.	0.9	2
513	An inclusive trend study of techno-economic analysis of biofuel supply chains. Chemosphere, 2022, 309, 136755.	4.2	9
514	Risk-based multistage stochastic mixed-integer optimization for biofuel supply chain management under multiple uncertainties. Renewable Energy, 2022, 200, 694-705.	4.3	6

#	ARTICLE	IF	CITATIONS
515	Designing a sustainable bioethanol supply chain network: A combination of machine learning and meta-heuristic algorithms. Industrial Crops and Products, 2022, 189, 115848.	2.5	23
516	Sustainable decision making for chemical process systems via dimensionality reduction of many objective problems. AICHE Journal, 2023, 69, .	1.8	1
517	How sustainable are the biodegradable medical gowns via environmental and social life cycle assessment?. Journal of Cleaner Production, 2022, 380, 135153.	4.6	3
518	INFLUENCE OF BIOMASS PRETREATMENT ON SUBSEQUENT PYROLYSIS AND HYDRODEOXYGENATION IN BIO-BASED TRANSPORT FUELS AND CHEMICALS PRODUCTION: A CRITICAL REVIEW. International Journal of Energy for A Clean Environment, 2023, 24, 59-114.	0.6	1
519	A multi-stage stochastic programming model for adaptive biomass processing operation under uncertainty. Energy Systems, $0$ , , .	1.8	0
520	Performance Measurement of the Sustainable Supply Chain During the COVID-19 Pandemic: A real-life case study. Foundations of Computing and Decision Sciences, 2022, 47, 327-358.	0.5	73
521	Optimization Model for the Energy Supply Chain Management Problem of Supplier Selection in Emergency Procurement. Systems, 2023, 11, 48.	1.2	2
522	Sustainability decision support framework for the prioritization of hydrogen energy systems. , 2023, , 273-313.		0
523	An updated literature review of CO2e calculation in road freight transportation., 2023, 2, 100068.		3
524	Integrated Land Suitability Assessment for Depots Siting in a Sustainable Biomass Supply Chain. Sensors, 2023, 23, 2421.	2.1	2
525	Supply chain network design with financial considerations: A comprehensive review. European Journal of Operational Research, 2024, 312, 799-839.	3.5	3
526	Application of Transformed Two-Stage Network DEA to Strategic Design of Biofuel Supply Chain Network. Journal of Systems Science and Systems Engineering, 0, , .	0.8	0
527	The Role of Straw Materials in Energy-Efficient Buildings: Current Perspectives and Future Trends. Energies, 2023, 16, 3480.	1.6	1
529	Suitability and sustainability of lignocellulosic biomass from farm to biorefinery., 2023,, 347-358.		0
533	Integrating environmental sustainability in next-generation biopharmaceutical supply chains. Computer Aided Chemical Engineering, 2023, , 3405-3410.	0.3	0
538	Current Lignocellulosic Biomass Logistics and Challenges. , 2023, , 39-64.		0
541	Sustainable Supply Chains by Integrating Life Cycle Modeling and Techno-ecological Synergy with Application to Mitigation of Harmful Algal Blooms. , 2023, , 375-406.		0