

Sr	Year	Title	Keywords	Comments	optimization objective (what aspect of SC is being optimized)	Tools used to build SC model
1	2019	Hybrid System modelling Approach for the Depiction of the Energy Consumption in Production Simulations	modelling Discrete + Continuous Sim, Supply chains	- model implemented in AnyLogic - discusses Energy Consumption in production processes		AnyLogic
2	2019	Real-time Supply Chain Simulation: A Big Data-Driven Approach	Supply chain simulation, modelling	- framework for big data tools + modelling and simulation		
3	2019	Study on the Operation Efficiency of Steel Stock Yard Using DES Simulation	Discrete Event Simulation	describes operations at a Supplier node (param)		AnyLogic
4	2019	A Military Food Supply Chain in a Hostile Environment: A Case Study	Supply chain, case study			
5	2019	Domain-specific Language for modelling and Simulating Actions in Logistics Networks	Supply chains, Logistic Networks, modelling	- novel approach for modelling logistic networks - they propose a modelling language for domain experts		
6	2019	Simulation-based Optimization of Sequencing Buffer Allocation in Automated Storage and Retrieval Systems for Automobile Production	SBO, automated storage and retrieval sys (AS/RS)	- Monte Carlo Simulation - shared buffer where auto parts wait for next task		
7	2019	Simulation-based Optimization Tool for Field Service Planning	SBO	- model implemented in AnyLogic - resource allocation optimization		AnyLogic
8	2019	Evaluating Mixed Integer Programming Models for Solving Stochastic Inventory Problems	Inventory	Inventory policies, Inventory problems		
9	2019	A Simulation Model to Determine Staffing Strategy and Warehouse Capacity for a Local Distribution Centre	modelling, Supply chains	- model and simulate operations at a particular warehouse (beverage distribution)	Warehouse operations and human resource management	Simio
10	2019	An Agent-based Modelling Framework for Urban Agriculture	modelling, supply chains	- modelling of an agriculture supply chain framework		

11	2019	Analysing Pre-Positioning within a Disrupted Bulk Petroleum Supply Chain	SC modelling, inventory	- modelling the disruptions in SC - metrics that can be used to asses the impact of disruptions		
12	2019	Simulating Profit Loss in Behavioural Newsvendor Problems	Inventory	- Monte Carlo Simulation - inventory policy	Related to increasing the profit margin by decisions makers	
13	2019	Simulation of Allocation Policies for a Serial Inventory System under Advance Demand Information	Inventory, DES	- inventory policies		
14	2019	Combining the Internet of Things with Simulation-based Optimization to Enhance Logistics in an Agri-Food Supply Chain	SBO, Supply Chains	- animal feed SC (inventory problem)		
15	2019	Simulation-based Optimization in Transportation and Logistics: Comparing Sample Average Approximation with Simheuristics	SBO, logistic			
16	2019	Inventory Management under Disruption Risk	Inventory, Resilience	inventory policies		
17	2019	An Inventory-Routing Problem with Stochastic Demand and Stock-out: A Solution and Risk Analysis using Simheuristics	Inventory, SC, optimization			
18	2019	Simulation-based Performance Evaluation of a Manufacturing Facility with Vertical AS/RS	Simulation modelling, DES	- operations at a manufacturing facility are simulated		
19	2019	Integrated Planning of Production and Engineering Activities in Semiconductor Supply Chains: A Simulation Study	SC, simulation modelling			
20	2019	Simulation-Based Analysis of the Nervousness within Semiconductor Supply Chain Planning: Insight from a Case Study	SC, simulation modelling			
21	2019	Metamodel-based Quantile Estimation for Hedging Control of Manufacturing Systems	metamodel	metamodels		
22	2019	Metamodel-assisted Sensitivity Analysis for Controlling the Impact of Input Uncertainty	metamodel			
23	2020	Carbon Capture and Storage Supply Chain	SC modelling, simulation			

24	2020	Simulation Optimization Approach for Reconfiguration of the Perishable Food Supply Chain During Disease Outbreak	SBO	market location prediction, SC network optimization		
25	2020	Primary Healthcare Delivery Network Simulation Using Stochastic Metamodels	DES, modelling, metamodel			
26	2020	Towards A More Sustainable Future? Simulating The Environmental Impact of Online and Offline Grocery Supply Chains	SC modelling	SC modelling and simulation, assessing CO2 costs		
27	2020	A Simulation-Optimization Approach for Locating Automated Parcel Lockers in Urban Logistics Operations	logistics, SBO	location prediction		
28	2020	Scenario-based Simulation Approach for an Integrated Inventory Blood Supply Chain System	SC modelling, Inventory, logistics			
29	2020	A Simulation Model for Short and Long Term Humanitarian Supply Chain Operations Management	SC modelling			
30	2020	Product Life Cycle Perspective on ICT Product Supply Chain Resilience	SC resilience, SC design	resilience metrics		
31	2020	A Deep Reinforcement Learning Approach For Optimal Replenishment Policy In A Vendor Managed Inventory Setting For Semiconductors	Inventory optimization	Inventory policies		
32	2020	Inventory Management with Disruption Risk	Inventory	Inventory policies		
33	2020	Simulation-based Digital Twin Development for Blockchain Enabled End-to-end Industrial Hemp Supply Chain Risk Management	Digital Twin, SC modelling			
34	2020	Facilitating Resilience of Domestic Pork Supply Chains Through Hybrid Simulation Modelling	SC modelling, resilience	Poster/case study/colloquium (2 page extended abstract)		
35	2020	A Simulation-Optimization Approach to Design a Resilient Food Supply Network for Natural Disaster Responses in West Java	SC modelling, resilience	Poster/case study/colloquium (2 page extended abstract)		
36	2021	Measuring the Impact of Data Standards in an Internal Hospital Supply System	SC modelling	input parameters, performance measures, inventory		
37	2021	Combining Simulation with Reliability Analysis in Supply Chain Project Management under Uncertainty: A Case Study in Healthcare	SC			

38	2021	From Logistics Process Models To Automated Integration Testing: Proof-of-Concept Using Open-Source Simulation Software	open-source simulation software	<a href="https://github.com/fladdimir/csa-vcom">https://github.com/fladdimir/csa-vcom</a>		
39	2021	Relief Food Supply Network Simulation	SC modelling simulation			
40	2021	Simulation of stochastic rolling horizon forecast behaviour with applied outlier correction to increase forecast accuracy	supply chain, demand forecast			
41	2021	Simulating and evaluating supply chain disruptions along an end-to-end semiconductor automotive supply chain	SC simulation, disruptions			
42	2021	Graph Neural Network Based Behaviour Prediction to Support Multi-Agent Reinforcement Learning in Military Training Simulations	GNN	-how input output is specified to the GNN -GNN arch experimented with/used		
43	2021	Improving Simulation Optimization Run Time When Solving for Periodic Review Inventory Policies in a Pharmacy	Inventory, SBO			
44	2021	Assessing Resilience of Medicine Supply Chain Networks to Disruptions: A Proposed Hybrid Simulation modelling Framework	SC resilience, SC modelling	resilience metrics		
45	2021	Neural Predictive Intervals for Simulation Metamodeling	metamodel			
46	2022	Calibrating Simulation Models with Sparse Data: Counterfeit Supply Chains During COVID-19	SC	some goodness/quality of fit measure are also discussed		
47	2022	Simulating Counterfeit Personal Protective Equipment (PPE) Supply Chains During Covid-19	SC	simulation-optimization framework		
48	2022	Covid-19 Supply Chain Planning: A Simulation-optimization Approach	SC, planning, SBO, Inventory	simio matlab for simulation		
49	2022	Metamodeling for Variable Annuity Valuation: 10 Years Beyond Kriging	metamodel	kind of a survey of popular metamodels		
50	2022	BloodChainSim – a Simulation Environment to Evaluate Digital Innovations in Blood Supply Chains	SC	built on top of AnyLogic		
51	2022	A System Dynamics Model for Studying the Resiliency of Supply Chains and Informing Mitigation Policies for Responding to Disruptions	SC, resilience	some input output parameters		

52	2022	Development of DES Application for Factory Material Flow Simulation with Simpy	DES, Simpy			
53	2022	Simulation of IT Data Integration to Optimize an Antibiotics Supply Chain with System Dynamics	SC, modelling, optimization	modelling, parameters		
54	2022	Modelling and Simulation of Food Bank Disaster Relief Operations	SC, modelling, simulation	modelling done in simio		
55	2022	Simulation-Based Order Management for the Animal Feed Industry	SC, modelling, simulation, optimization	(model built using AnyLogic) proposes decision strategy to decide when to order		
56	2022	An Agent-based Simulation Model to Mitigate the Bullwhip Effect via Information Sharing and Risk Pooling	SC, modelling, simulation	risk pooling and info sharing is effective to mitigate bullwhip		
57	2022	Optimal Team Formation and Job Assignment to Optimize Warehouse Operations	Inventory, SBO	Inventory replenishment policies		
58	2022	Carbon Policies in Network Distribution: A Simulation Approach for Sustainable Supply Chains	Supply Chains, Carbon Policy	Carbon cost calculation policies in SC logistics		
59	2022	Automatic Component-based Synthesis of User-Configured Manufacturing Simulation Models	Modelling Simulation	Modelling and Simulation of a Manufacturing Plant. Automate and reduce the cost of simulation model creation	Model creation for Manufacturing plants	CLS framework with DES
60	2022	Development of a data-driven Simulation Model for an Assembly-To-Order System	Simulation modelling, DES	modelling and simulation of ATOS systems to identify bottlenecks		FlexSim
61	2022	Improvement of the Kanban System for an Automotive Company via Discrete Event Simulation: Otokar	modelling, simulation, optimization, Inventory	short paper (2 pages)		Arena, OptQuest
62	2022	Graph Representation and Embedding for Semiconductor Manufacturing Fab States	graph2vec graph representation learning	proposed for performance analysis of semiconductor manufacturing		
63	2022	Simulated-Based Analysis Of Recovery Actions Under Vendor-Managed Inventory Amid Black Swan Disruptions In The Semiconductor Industry: A Case Study From Infineon Technologies AG	Simulation modelling, DES + ABM	evaluates the performance of specific inventory (Vendor Managed Inventory VMI) in case study from semi-conductor SC		AnyLogic
64	2022	Enhanced Simulation Metamodeling via Graph and Generative Neural Networks	GNN, Metamodel, Simulation modelling	GNN metamodel for DES simulation model		

65	2022	Simulation Optimization for Supply Chain Decision Making	Supply Chain, Optimization	authors discuss SC structure and aspects that can be optimized		
66	2023	A Simulation-Based Method for Analysing Supply Chain Vulnerability Under Pandemic: A Special Focus on the Covid-19	Supply chain, risk analysis			
67	2023	Effects of Timing of Agents' Reactions in Pharmaceutical Supply Chains under Disruption	Supply Chain simulation	ABS. disruptions in SC and their effect on Agents' behaviours		
68	2023	Causal Dynamic Bayesian Networks for Simulation Metamodeling	Metamodel	novel metamodel is proposed		
69	2023	System Dynamics Simulation of External Supply Chain Disruptions on a Simplified Semiconductor Supply Chain	Supply chain modelling, simulation, resilience	modelling disruptions in semiconductor SC		AnyLogic
70	2023	Simulation-Driven Digital Twins: The DNA of Resilient Supply Chains	Supply Chain	SC network DT example (tutorial paper)		
71	2023	Conceptual Modelling for Perishable Inventory: A Case Study in Human Milk Banking	Inventory	Perishable Inventory management		
72	2023	A Hybrid System Dynamics/Input-Output Model for Studying the Impact of Transportation Delays on the Resilience of National Supply Chains	Supply chain, modelling	effect of transportation delay across the industries		
73	2023	Evaluating the Effectiveness of Countermeasures in ICT Supply Chains through Elicitation-Informed Simulation	supply chain simulation, modelling	Supply chain example (parameters)		
74	2023	How Not to Visualize Your Simulation Output Data	Data visualization	How points to consider when visualizing simulation data		
75	2023	A Simulation-Based TDABC Model to Manage Supply Chain Costing: A Case Study	Supply chain	SC costing framework is proposed		
76	2023	A Deep Q-Network Based on Radial Basis Functions for Multi-Echelon Inventory Management	Inventory, optimization	Neural network based method for inventory levels optimization		
77	2023	An Integrated System Dynamics and Discrete Event Supply Chain Simulation Framework for Supply Chain Resilience with Non-stationary Pandemic Demand	Supply chain, SC resilience	SC framework is proposed		
78	2023	Simulating the Impact of Forecast related Overbooking and Underbooking Behaviour on MRP Planning and a Reorder Point System	Inventory	Inventory replenishment under disruptions		

79	2023	Rolling-Horizon Simulation Optimization for a Multi-Objective Biomanufacturing Scheduling Problem	SBO	<a href="#">scheduling problem modelled using SimPy link</a>		
80	2023	Modelling Risk Prioritization of a Manufacturing Supply Chain using Discrete Event Simulation	Supply chain modelling, DES, resilience	risk assessment of manufacturing SC		
81	2023	Digital Twins for Supply Chains: Main Functions, Existing Applications, and Research Opportunities	DT, Supply chains	lit review of existing work and identifying challenges and future directions		
82	2023	Investigating Production Yield Effect on Inventory Control Through a Hybrid Simulation Approach	Inventory, Production Planning & Control (PPC)	Simulation model to improve production planning and avoid extra holding costs and excess inventory		AnyLogic
83	2023	The Bullwhip Effect in End-to-end Supply Chains: The Impact of Reach-based Replenishment Policies with a Long Cycle Time Supplier	Inventory, supply chains, simulation	inventory replenishment policies		not specified
84	2023	A Simulation-Optimization Approach for Designing Resilient Hyperconnected Physical Internet Supply Chains	Supply chain, SBO, logistics	Simulation based optimization - optimization of cost and resilience of SC	SC cost, SC resilience	
85	2023	Towards Greener Stochastic Derivative-Free Optimization with Trust Regions and Adaptive Sampling	SBO	iterative optimization method based on trust region and resampling		
86	2023	Efficient Hybrid Simulation Optimization via Graph Neural Network Metamodeling	GNN, metamodel, SBO	GNN metamodel for SBO is proposed. Authors use Automatic Differentiation to calculate the gradient with respect to inputs for the purpose of optimization		