

Cathal Heavey

List of Publications by Year in descending order

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Version: 2024-02-01

79
papers

2,350
citations

257450

24
h-index

223800

46
g-index

81
all docs

81
docs citations

81
times ranked

1885
citing authors

#	ARTICLE	IF	CITATIONS
1	Building an agent-based techno-economic assessment coupled with life cycle assessment of biomass to methanol supply chains. Applied Energy, 2022, 309, 118449.	10.1	18
2	Use of Model-Based System Engineering methodology and tools for disruption analysis of supply chains: A case in semiconductor manufacturing. Journal of Industrial Information Integration, 2022, 28, 100335.	6.4	4
3	Evolutionary Learning Based Simulation Optimization for Stochastic Job Shop Scheduling Problems. Applied Soft Computing Journal, 2021, 106, 107309.	7.2	31
4	An Evaluation of Strategies for Job Mix Selection in Job Shop Production Environments - Case: A Photolithography Workstation. , 2021, , .		1
5	Performance evaluation of flow lines with non-identical and unreliable parallel machines and finite buffers. International Journal of Production Research, 2020, 58, 3881-3904.	7.5	11
6	Optimizing capacity allocation in semiconductor manufacturing photolithography area “ Case study: Robert Bosch. Journal of Manufacturing Systems, 2020, 54, 123-137.	13.9	18
7	Product-service systems in Egypt: a multicase evaluation of field repair. International Journal of Emerging Markets, 2020, ahead-of-print, .	2.2	0
8	Embedding optimization with deterministic discrete event simulation for assignment of cross-trained operators: An assembly line case study. Computers and Operations Research, 2019, 111, 99-115.	4.0	14
9	MATHEMATICAL MODELLING OF PRODUCTS ALLOCATION TO CUSTOMERS FOR SEMICONDUCTOR SUPPLY CHAIN. Procedia Manufacturing, 2019, 38, 1042-1049.	1.9	8
10	A Survey of Model-Based System Engineering Methods to Analyse Complex Supply Chains: A Case Study in Semiconductor Supply Chain. IFAC-PapersOnLine, 2019, 52, 1254-1259.	0.9	8
11	Intelligent sustainable supplier selection using multi-agent technology: Theory and application for Industry 4.0 supply chains. Computers and Industrial Engineering, 2019, 127, 588-600.	6.3	133
12	Supply chain collaboration and firm’s performance. Journal of Enterprise Information Management, 2018, 31, 358-379.	7.5	125
13	Contributions to stochastic models of manufacturing and service operations. IISE Transactions, 2018, 50, 141-142.	2.4	2
14	A multi-agent systems approach for sustainable supplier selection and order allocation in a partnership supply chain. European Journal of Operational Research, 2018, 269, 286-301.	5.7	159
15	A REVIEW OF SIMULATION-OPTIMIZATION METHODS WITH APPLICATIONS TO SEMICONDUCTOR OPERATIONAL PROBLEMS. , 2018, , .		3
16	IMPLEMENTING A NEW GENETIC ALGORITHM TO SOLVE THE CAPACITY ALLOCATION PROBLEM IN THE PHOTOLITHOGRAPHY AREA. , 2018, , .		2
17	Sustainable supplier performance scoring using audition check-list based fuzzy inference system: A case application in automotive spare part industry. Computers and Industrial Engineering, 2017, 105, 12-27.	6.3	59
18	Making sustainable sourcing decisions: practical evidence from the automotive industry. International Journal of Logistics Research and Applications, 2017, 20, 297-321.	8.8	30

#	ARTICLE	IF	CITATIONS
19	ManPy: an open-source software tool for building discrete event simulation models of manufacturing systems. <i>Software - Practice and Experience</i> , 2016, 46, 955-981.	3.6	5
20	KE tool: An open source software for automated input data in Discrete Event Simulation projects. , 2016, , .		6
21	A demonstration of machine learning for explicit functions for cycle time prediction using MES data. , 2016, , .		10
22	Automation of input data to discrete event simulation for manufacturing: A review. <i>International Journal of Modeling, Simulation, and Scientific Computing</i> , 2016, 07, 1630001.	1.4	38
23	A simulation based continuous improvement approach for manufacturing based field repair service contracting. <i>International Journal of Production Research</i> , 2016, 54, 6458-6477.	7.5	7
24	A review on the buyerâ€™supplier dyad relationships in sustainable procurement context: past, present and future. <i>International Journal of Production Research</i> , 2016, 54, 1443-1462.	7.5	73
25	A review of open source discrete event simulation software for operations research. <i>Journal of Simulation</i> , 2016, 10, 193-206.	1.5	45
26	A hybrid approach to the study of CPFR implementation enablers. <i>Production Planning and Control</i> , 2015, 26, 1090-1109.	8.8	29
27	Developing retailer selection factors for collaborative planning, forecasting and replenishment. <i>Industrial Management and Data Systems</i> , 2015, 115, 1292-1324.	3.7	13
28	Quantitative analysis of semiconductor supply chain contracts with order flexibility under demand uncertainty: A case study. <i>Computers and Industrial Engineering</i> , 2015, 87, 394-406.	6.3	13
29	A survey of open source data science tools. <i>International Journal of Intelligent Computing and Cybernetics</i> , 2015, 8, 232-261.	2.7	23
30	A framework for Collaborative Planning, Forecasting and Replenishment (CPFR). <i>Journal of Enterprise Information Management</i> , 2015, 28, 838-871.	7.5	47
31	Test Implementation and Initialisation of a Simulation Model Using CMSD. <i>Procedia CIRP</i> , 2014, 25, 276-282.	1.9	3
32	Simulation Based Decision Support Systems: An Industrial End-user Based Requirement Gathering Process. <i>Procedia CIRP</i> , 2014, 25, 238-245.	1.9	0
33	Implementing ManPy, a Semantic-free Open-source Discrete Event Simulation Package, in a Job Shop. <i>Procedia CIRP</i> , 2014, 25, 253-260.	1.9	6
34	Generating operating curves in complex systems using machine learning. , 2014, , .		2
35	MASOS: A multi-agent system simulation framework for sustainable supplier evaluation and order allocation. , 2014, , .		1
36	ISM analysis of CPFR implementation barriers. <i>International Journal of Production Research</i> , 2014, 52, 5255-5272.	7.5	43

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37	Sustainable Supplier Selection in Medical Device Industry: Toward Sustainable Manufacturing. <i>Procedia CIRP</i> , 2014, 15, 165-170.	1.9	79
38	Development of an open-source Discrete Event Simulation cloud enabled platform. , 2014, , .		4
39	A simulation based supply partner selection decision support tool for service provision in Dell. <i>Computers and Industrial Engineering</i> , 2013, 64, 1033-1044.	6.3	19
40	A Review of Applications of Agent-Based Modelling and Simulation in Supplier Selection Problem. , 2013, , .		5
41	A Study on CPFR Implementation Critical Factors for the Automotive Spare Part Industry. , 2013, , .		6
42	Impact of Recipe Restrictions on Photolithography Toolsets in an ASIC Fabrication Environment. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2013, 26, 53-68.	1.7	7
43	ManPy: An Open-Source Layer of DES Manufacturing Objects Implemented in SimPy. , 2013, , .		9
44	Capacity modelling of a wet bench cluster tool with material handling robot. <i>International Journal of Computer Integrated Manufacturing</i> , 2012, 25, 1029-1046.	4.6	1
45	Single toolset modeling approaches in semiconductor manufacturing. , 2012, , .		0
46	A comparison of genetic programming and artificial neural networks in metamodeling of discrete-event simulation models. <i>Computers and Operations Research</i> , 2012, 39, 424-436.	4.0	85
47	Modeling supply contracts in semiconductor supply chains. , 2011, , .		10
48	Comparison of experimental designs for simulation-based symbolic regression of manufacturing systems. <i>Computers and Industrial Engineering</i> , 2011, 61, 447-462.	6.3	57
49	An investigation of the influence of coefficient of variation in the demand distribution on the performance of several lean production control strategies. <i>International Journal of Manufacturing Technology and Management</i> , 2010, 20, 94.	0.1	9
50	A review of Web-based simulation and supporting tools. <i>Simulation Modelling Practice and Theory</i> , 2010, 18, 253-276.	3.8	121
51	Sustainable supply chain design: capturing dynamic input factors. <i>Journal of Simulation</i> , 2010, 4, 213-221.	1.5	17
52	Proposed visual wiki system for gathering knowledge about discrete event systems. , 2010, , .		2
53	Performance improvement for a wet bench tool. , 2010, , .		3
54	An Evaluation of SysML to Support Simulation Modeling. , 2010, , 279-307.		5

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55	Sequential metamodeling with genetic programming and particle swarms. , 2009, , .		4
56	Investigation of rolling horizon flexibility contracts in a supply chain under highly variable stochastic demand. IMA Journal of Management Mathematics, 2008, 19, 117-135.	1.6	14
57	Analysis of multiple process flows in an ASIC fab with a detailed photolithography area model. , 2008, , .		3
58	A comparative study of genetic algorithm components in simulation-based optimisation. , 2008, , .		15
59	Discrete-event simulation for evaluating virtual organizations. International Journal of Production Research, 2008, 46, 1335-1356.	7.5	17
60	An analysis of tool capabilities in the photolithography area of an asic fab. , 2007, , .		3
61	Development of a process modelling tool for simulation. Journal of Simulation, 2007, 1, 203-213.	1.5	6
62	Approximate analysis of serial flow lines with multiple parallel-machine stations. IIE Transactions, 2007, 39, 361-375.	2.1	35
63	An evaluation of simulation to support contract costing. Computers and Operations Research, 2007, 34, 3652-3665.	4.0	2
64	Contract costing in outsourcing enterprises: Exploring the benefits of discrete-event simulation. International Journal of Production Economics, 2007, 110, 97-114.	8.9	25
65	Process Modelling Support for the Conceptual Modelling Phase of a Simulation Project. , 2006, , .		6
66	The impact of information sharing and forecasting in capacitated industrial supply chains: A case study. International Journal of Production Economics, 2006, 103, 420-437.	8.9	136
67	Process modeling for simulation. Computers in Industry, 2006, 57, 437-450.	9.9	72
68	A review and comparison of hybrid and pull-type production control strategies. , 2006, , 307-329.		13
69	On the workload and "phasesload"™ allocation problems of short reliable production lines with finite buffers. Computers and Industrial Engineering, 2005, 48, 825-837.	6.3	22
70	A review and comparison of hybrid and pull-type production control strategies. OR Spectrum, 2005, 27, 435-457.	3.4	49
71	A comparison of Hybrid Push/Pull and CONWIP/Pull production inventory control policies. International Journal of Production Economics, 2004, 91, 75-90.	8.9	64
72	Developing simulation as a desktop resource. International Journal of Computer Integrated Manufacturing, 2004, 17, 435-450.	4.6	13

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73	Development of a process model simulator. <i>Simulation Modelling Practice and Theory</i> , 2002, 10, 13-33.	3.8	5
74	Queueing theory in manufacturing systems analysis and design: A classification of models for production and transfer lines. <i>European Journal of Operational Research</i> , 1996, 92, 1-27.	5.7	248
75	A model management systems approach to manufacturing systems design. <i>Flexible Services and Manufacturing Journal</i> , 1996, 8, 103-130.	0.4	6
76	The throughput rate of multistation unreliable production lines. <i>European Journal of Operational Research</i> , 1993, 68, 69-89.	5.7	68
77	Throughput rate of multistation reliable production lines with inter station buffers (II) Erlang case. <i>Computers in Industry</i> , 1990, 13, 317-335.	9.9	28
78	Throughput rate of multistation reliable production lines with inter station buffers. <i>Computers in Industry</i> , 1989, 13, 229-244.	9.9	40
79	An Integrated Approach for Sustainable Supplier Selection Using Fuzzy Logic and Fuzzy AHP. <i>Applied Mechanics and Materials</i> , 0, 315, 206-210.	0.2	27