

Zbigniew Banaszak

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1062143/publications.pdf>

Version: 2024-02-01

133
papers

1,730
citations

471061

17
h-index

344852

36
g-index

146
all docs

146
docs citations

146
times ranked

657
citing authors

#	ARTICLE	IF	CITATIONS
1	Deadlock avoidance in flexible manufacturing systems with concurrently competing process flows. IEEE Transactions on Automation Science and Engineering, 1990, 6, 724-734.	2.4	482
2	A methodology for implementation of mobile robot in adaptive manufacturing environments. Journal of Intelligent Manufacturing, 2017, 28, 1171-1188.	4.4	70
3	UAV Mission Planning Resistant to Weather Uncertainty. Sensors, 2020, 20, 515.	2.1	59
4	Declarative approach to cyclic steady state space refinement: periodic process scheduling. International Journal of Advanced Manufacturing Technology, 2013, 67, 137-155.	1.5	58
5	Energy Consumption in Unmanned Aerial Vehicles: A Review of Energy Consumption Models and Their Relation to the UAV Routing. Advances in Intelligent Systems and Computing, 2019, , 173-184.	0.5	55
6	Metaheuristic algorithms for balancing robotic assembly lines with sequence-dependent robot setup times. Applied Mathematical Modelling, 2019, 65, 256-270.	2.2	50
7	Optimization of capacitated vehicle routing problem with alternative delivery, pick-up and time windows: A modified hybrid approach. Neurocomputing, 2021, 423, 670-678.	3.5	49
8	Automated guided vehicles fleet match-up scheduling with production flow constraints. Engineering Applications of Artificial Intelligence, 2014, 30, 49-62.	4.3	44
9	Production flows scheduling subject to fuzzy processing time constraints. International Journal of Computer Integrated Manufacturing, 2016, 29, 1105-1127.	2.9	41
10	Unmanned Aerial Vehicle Routing Problems: A Literature Review. Applied Sciences (Switzerland), 2020, 10, 4504.	1.3	41
11	Planning deliveries with UAV routing under weather forecast and energy consumption constraints. IFAC-PapersOnLine, 2019, 52, 820-825.	0.5	39
12	Constraint programming for project-driven manufacturing. International Journal of Production Economics, 2009, 120, 463-475.	5.1	33
13	Iterative multimodal processes scheduling. Annual Reviews in Control, 2014, 38, 113-122.	4.4	30
14	Design of Admissible Schedules for AGV Systems with Constraints: A Logic-Algebraic Approach. Lecture Notes in Computer Science, 2007, , 578-587.	1.0	27
15	Logistics models in flexible manufacturing. Computers in Industry, 2000, 43, 237-248.	5.7	26
16	A Solution Approach for UAV Fleet Mission Planning in Changing Weather Conditions. Applied Sciences (Switzerland), 2019, 9, 3972.	1.3	22
17	Material supply scheduling in a ubiquitous manufacturing system. Robotics and Computer-Integrated Manufacturing, 2017, 45, 21-33.	6.1	20
18	Design of steady-state behavior of concurrent repetitive processes: an algebraic approach. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 1998, 28, 199-212.	3.4	18

#	ARTICLE	IF	CITATIONS
19	Project-driven planning and scheduling support for virtual manufacturing. Journal of Intelligent Manufacturing, 2006, 17, 641-651.	4.4	17
20	Reactive UAV Fleet's Mission Planning in Highly Dynamic and Unpredictable Environments. Sustainability, 2021, 13, 5228.	1.6	17
21	Multimodal processes prototyping subject to grid-like network and fuzzy operation time constraints. Annals of Operations Research, 2019, 273, 561-585.	2.6	15
22	Reference model of milk-run traffic systems prototyping. International Journal of Production Research, 2021, 59, 4495-4512.	4.9	15
23	Agvs Distributed Control Subject to Imprecise Operation Times. , 2008, , 421-430.		15
24	Computer-aided prototyping of production flows for a virtual enterprise. Journal of Intelligent Manufacturing, 2003, 14, 83-106.	4.4	14
25	Multimodal Processes Rescheduling: Cyclic Steady States Space Approach. Mathematical Problems in Engineering, 2013, 2013, 1-24.	0.6	14
26	A cyclic scheduling approach to maintaining production flow robustness. Advances in Mechanical Engineering, 2018, 10, 168781401774624.	0.8	14
27	Factors Affecting Energy Consumption of Unmanned Aerial Vehicles: An Analysis of How Energy Consumption Changes in Relation to UAV Routing. Advances in Intelligent Systems and Computing, 2019, , 228-238.	0.5	13
28	Cyclic Steady State Refinement: Multimodal Processes Perspective. International Federation for Information Processing, 2012, , 18-26.	0.4	13
29	Milk-run Routing and Scheduling Subject to Fuzzy Pickup and Delivery Time Constraints: An Ordered Fuzzy Numbers Approach. , 2020, , .		12
30	Integrated fault-tolerant control of assembly and automated guided vehicle-based transportation layers. International Journal of Computer Integrated Manufacturing, 2022, 35, 409-426.	2.9	12
31	CP-Based Decision Support for Project Driven Manufacturing. , 2006, , 409-437.		12
32	Performance Evaluation for Concurrent Processing in Cyclic Systems. Concurrent Engineering Research and Applications, 1995, 3, 123-130.	2.0	11
33	A max-algebra approach to the robust distributed control of repetitive AGV systems. International Journal of Production Research, 1997, 35, 2667-2688.	4.9	11
34	An ordered-fuzzy-numbers-driven approach to the milk-run routing and scheduling problem. Journal of Computational Science, 2021, 49, 101288.	1.5	10
35	Distributed bottleneck control for repetitive production systems. Journal of Intelligent Manufacturing, 1997, 8, 415-424.	4.4	9
36	Cyclic Scheduling for Supply Chain Network. Advances in Intelligent and Soft Computing, 2012, , 39-47.	0.2	9

#	ARTICLE	IF	CITATIONS
37	Constraint Programming Approach to Time-Window and Multiresource-Constrained Projects Portfolio Prototyping. Lecture Notes in Computer Science, 2008, , 767-776.	1.0	9
38	On Undecidability of Cyclic Scheduling Problems. Lecture Notes in Computer Science, 2009, , 310-321.	1.0	9
39	Declarative Approach to Cyclic Scheduling of Multimodal Processes. Ecoproduction, 2013, , 203-235.	0.8	9
40	Competence allocation planning robust to unexpected staff absenteeism. Eksploatacja I Niezawodnosc, 2019, 21, 440-450.	1.1	9
41	Declarative Modeling for Production Order Portfolio Scheduling. Foundations of Management, 2014, 6, 7-24.	0.2	8
42	Multimodal processes prototyping subject to fuzzy operation time constraints. IFAC-PapersOnLine, 2015, 48, 2103-2108.	0.5	8
43	On liveness and a class of generalized Petri nets. , 2017, , .		8
44	Siphon-based deadlock prevention for a class of S4PR generalized Petri nets. , 2017, , .		8
45	TOWARDS THE LEVELING OF MULTI-PRODUCT BATCH PRODUCTION FLOWS. A MULTIMODAL NETWORKS PERSPECTIVE.. IFAC-PapersOnLine, 2018, 51, 1434-1441.	0.5	8
46	UAVs Fleet Mission Planning Subject to Weather Fore-Cast and Energy Consumption Constraints. Advances in Intelligent Systems and Computing, 2020, , 104-114.	0.5	8
47	A Declarative Modelling Framework for Routing of Multiple UAVs in a System with Mobile Battery Swapping Stations. Advances in Intelligent Systems and Computing, 2019, , 429-441.	0.5	8
48	Multimodal processes scheduling in mesh-like network environment. Archives of Control Sciences, 2015, 25, 237-261.	1.7	7
49	Multiple Project Portfolio Scheduling Subject to Mass Customized Service. Advances in Intelligent Systems and Computing, 2015, , 11-21.	0.5	7
50	Traffic flow routing and scheduling in a food supply network. Industrial Management and Data Systems, 2017, 117, 1972-1994.	2.2	7
51	Delivery-flow routing and scheduling subject to constraints imposed by vehicle flows in fractal-like networks. Archives of Control Sciences, 2017, 27, 135-150.	1.7	7
52	Interactive Planning of Competency-Driven University Teaching Staff Allocation. Applied Sciences (Switzerland), 2020, 10, 4894.	1.3	7
53	A Proactive Approach to Resistant UAV Mission Planning. Advances in Intelligent Systems and Computing, 2020, , 112-124.	0.5	7
54	Mass Customized Projects Portfolio Scheduling - Imprecise Operations Time Approach. Applied Mechanics and Materials, 2015, 791, 70-80.	0.2	6

#	ARTICLE	IF	CITATIONS
55	Multimodal processes optimization subject to fuzzy operation time constraints: declarative modeling approach. <i>Frontiers of Information Technology and Electronic Engineering</i> , 2016, 17, 338-347.	1.5	6
56	Re-scheduling of AGVs Steady State Flow. <i>IFAC-PapersOnLine</i> , 2017, 50, 3493-3498.	0.5	6
57	Fuzzy modelling and robust fault-tolerant scheduling of cooperating forklifts. , 2020, , ,		5
58	Pricing and quality competition for substitutable green products with a common retailer. <i>Operational Research</i> , 2022, 22, 3713-3746.	1.3	5
59	Declarative Modeling of Multimodal Cyclic Processes. <i>Environmental Science and Engineering</i> , 2011, , 551-566.	0.1	5
60	Toward Cyclic Scheduling of Concurrent Multimodal Processes. <i>Lecture Notes in Computer Science</i> , 2011, , 448-457.	1.0	5
61	Reference Model of Project Prototyping Problem. <i>Foundations of Management</i> , 2011, 3, 33-46.	0.2	5
62	Modelling and Performance Evaluation of Fractal Topology Streets Network. <i>Advances in Intelligent Systems and Computing</i> , 2016, , 483-494.	0.5	5
63	Modelling of distributed control for repetitive production flow prototyping. <i>International Journal of Computer Integrated Manufacturing</i> , 2005, 18, 386-394.	2.9	4
64	Milk-run routing and scheduling subject to different pick-up/delivery profiles and congestion-avoidance constraints. <i>IFAC-PapersOnLine</i> , 2019, 52, 313-320.	0.5	4
65	A Declarative Approach to New Product Development Project Prototyping. <i>IEEE Intelligent Systems</i> , 2021, 36, 88-95.	4.0	4
66	Dynamic Planning of Mobile Service Teamsâ€™ Mission Subject to Orders Uncertainty Constraints. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 8872.	1.3	4
67	Declarative Model of Competences Assessment Robust to Personnel Absence. <i>Communications in Computer and Information Science</i> , 2019, , 12-23.	0.4	4
68	Cyclic Scheduling of Multimodal Concurrently Flowing Processes. <i>Advances in Intelligent Systems and Computing</i> , 2014, , 587-598.	0.5	4
69	CP-driven Production Process Planning in Multiproject Environment. <i>Decision Making in Manufacturing and Services</i> , 2013, 2, 5-32.	0.2	4
70	Designing Mass-Customized Network of Passenger Services Subject to Grid Topology Constraints. <i>Advances in Intelligent Systems and Computing</i> , 2017, , 120-131.	0.5	4
71	Concurrent Processes Flow Prototyping. , 2005, , 87-100.		3
72	Reduction of Congestion in Transport Networks with a Fractal Structure. <i>Advances in Intelligent Systems and Computing</i> , 2017, , 189-201.	0.5	3

#	ARTICLE	IF	CITATIONS
73	Reference Model of a Milk-Run Delivery Problem. Lecture Notes in Mechanical Engineering, 2019, , 150-160.	0.3	3
74	Rerouting and Rescheduling of In-Plant Milk Run Based Delivery Subject to Supply Reconfigurability Constraints. Studies in Systems, Decision and Control, 2021, , 55-78.	0.8	3
75	Periodic planning of UAVs' fleet mission with the uncertainty of travel parameters. , 2021, , .		3
76	A fuzzy logic approach to remaining useful life control and scheduling of cooperating forklifts. , 2021, , .		3
77	Reactive Planning-Driven Approach to Online UAVs Mission Rerouting and Rescheduling. Applied Sciences (Switzerland), 2021, 11, 8898.	1.3	3
78	Blockage-Free Route Planning for In-Plant Milk-Run Material Delivery Systems. Studies in Systems, Decision and Control, 2020, , 105-132.	0.8	3
79	Simulation Versus an Orderedâ€Fuzzy-Numbers-Driven Approach to the Multi-depot Vehicle Cyclic Routing and Scheduling Problem. Lecture Notes in Computer Science, 2020, , 251-266.	1.0	3
80	Reachability Modeling for Multimodal Networks Prototyping. Advances in Intelligent Systems and Computing, 2014, , 1-9.	0.5	3
81	Reachability of Cyclic Steady States Space: Declarative Modeling Approach. Lecture Notes in Computer Science, 2012, , 233-243.	1.0	3
82	Robust Competence Allocation for Multi-project Scheduling. Advances in Intelligent Systems and Computing, 2020, , 16-30.	0.5	3
83	Declarative Modelling Approach for New Product Development. IFAC-PapersOnLine, 2020, 53, 10525-10530.	0.5	3
84	The no-wait cyclic scheduling of delivery traffic in the grid distribution network. ISA Transactions, 2022, , .	3.1	3
85	Deadlock-free distributed control for repetitive flows. , 0, , .		2
86	Knowledge Engineering Approach to Concurrently Competng Cyclic Processes Control. , 2006, , .		2
87	Decision support tool for resource allocation subject to imprecise data constraints. , 2009, , .		2
88	Robust Scheduling Subject to Multi-project Environment Constraints. Advances in Intelligent Systems and Computing, 2016, , 115-126.	0.5	2
89	Designing Mass-Customized Service Subject to Public Grid-Like Network Constraints. Advances in Intelligent Systems and Computing, 2017, , 221-231.	0.5	2
90	Fault-tolerant control-based flexible AGV transportation in a seat assembly system. IFAC-PapersOnLine, 2019, 52, 67-72.	0.5	2

#	ARTICLE	IF	CITATIONS
91	A Diophantine Set-Driven Approach to Part Sets Cycle Time Scheduling and Repetitive Flow Balancing. <i>Advances in Intelligent Systems and Computing</i> , 2018, , 233-243.	0.5	2
92	Declarative Modeling Driven Approach to Production Orders Portfolio Prototyping. <i>Intelligent Systems Reference Library</i> , 2016, , 141-168.	1.0	2
93	Cyclic Steady-State Approach to Modelling of Multimodal Processes Flow Levelling. <i>Lecture Notes in Mechanical Engineering</i> , 2018, , 215-225.	0.3	2
94	A method for planning competency frameworks robust to disruptions - a case study of a manufacturing company. <i>IFAC-PapersOnLine</i> , 2021, 54, 1073-1080.	0.5	2
95	Prototyping of distributed control procedures in concurrent cyclic processes systems. , 0, , .		1
96	Workflows Management for Project-Driven Manufacturing. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2003, 36, 149-154.	0.4	1
97	Automated Vehicles' Work Planning in Flexible Manufacturing Systems. , 2006, , .		1
98	Decision Support Systems Based on CLP Approach in SMEs. , 2006, , .		1
99	Logic-algebraic method based and constraints programming driven approach to AGVs scheduling. <i>International Journal of Intelligent Information and Database Systems</i> , 2009, 3, 56.	0.3	1
100	Cyclic scheduling of multimodal processes in mesh-like environment. , 2013, , .		1
101	Cyclic Scheduling of Multimodal Processes in Crystalline-like Network Structures. <i>Procedia Computer Science</i> , 2014, 35, 1567-1576.	1.2	1
102	Introduction to the special issue on research advances for next-generation production systems. <i>Production and Manufacturing Research</i> , 2014, 2, 674-675.	0.9	1
103	Declarative approach to DSS design for supervisory control of production orders portfolio. , 2016, , .		1
104	Travel itinerary planning for fractal-like multimodal transportation networks. <i>IFAC-PapersOnLine</i> , 2016, 49, 1644-1649.	0.5	1
105	Competence-driven employee substitutability planning robust to unexpected staff absenteeism. <i>IFAC-PapersOnLine</i> , 2019, 52, 61-66.	0.5	1
106	A decision support model for prototyping in-plant milk-run traffic systems. <i>IFAC-PapersOnLine</i> , 2019, 52, 814-819.	0.5	1
107	Periodic Distributed Delivery Routes Planning Subject to Uncertainty of Travel Parameters. <i>Lecture Notes in Computer Science</i> , 2021, , 277-289.	1.0	1
108	Constraint Programming for New Product Development Project Prototyping. <i>Lecture Notes in Computer Science</i> , 2020, , 26-37.	1.0	1

#	ARTICLE	IF	CITATIONS
109	Abductive Reasoning Driven Approach to Project - Like Production Flow Prototyping. Foundations of Management, 2009, 1, 43-62.	0.2	1
110	Rescheduling of Concurrently Flowing Cyclic Processes. Lecture Notes in Computer Science, 2012, , 212-222.	1.0	1
111	Research Framework for Studying Driver Distraction on Polish City Highways. Management and Production Engineering Review, 2013, 4, .	1.4	1
112	Multimodal Processes Rescheduling. IFIP Advances in Information and Communication Technology, 2013, , 534-541.	0.5	1
113	A Synthesis Method for Petri Net with Prescribed Firing Sequence. Transactions of the Society of Instrument and Control Engineers, 1985, 21, 277-283.	0.1	1
114	Towards Cyclic Scheduling of Grid-Like Structure Networks. Advances in Intelligent Systems and Computing, 2016, , 13-27.	0.5	1
115	Synthesis of No-Wait Cyclic Schedules for Cascade-Like Systems of Repetitive Processes with Fixed Periods. Advances in Intelligent Systems and Computing, 2020, , 3-15.	0.5	1
116	Comparison of exact and approximate approaches to UAVs mission contingency planning in dynamic environments. Mathematical Biosciences and Engineering, 2022, 19, 7091-7121.	1.0	1
117	Modeling and control of deadlocks in a flexible machining cell. , 1993, , .		0
118	Rapid Prototyping of Robust Distributed Control for Repetitive Manufacturing. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 799-804.	0.4	0
119	Knowledge-based and CP-driven methodology for dedicated DSS design. , 2006, , .		0
120	Projects portfolio prototyping. , 2008, , .		0
121	Knowledge Based Approach to Project Prototyping. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 1845-1850.	0.4	0
122	A declarative approach to cyclic processes coupling and scheduling. , 2012, , .		0
123	Declarative Approach to AGVS Modeling and Cyclic Scheduling. Applied Mechanics and Materials, 2013, 421, 573-578.	0.2	0
124	Out-Plant Milk-Run-Driven Mission Planning Subject to Dynamic Changes of Date and Place Delivery. Lecture Notes in Computer Science, 2021, , 151-167.	1.0	0
125	Cost Projections for the Product Life Cycle at the Early Stages of Product Development. IFIP Advances in Information and Communication Technology, 2021, , 437-446.	0.5	0
126	Decision Support Model for the Configuration of Multidimensional Resources in Multi-project Management. Lecture Notes in Computer Science, 2021, , 290-303.	1.0	0

#	ARTICLE	IF	CITATIONS
127	An Experimental Investigation of Lead Time and the Effect of Order Crossover. Advances in Intelligent Systems and Computing, 2018, , 89-97.	0.5	0
128	Competence-oriented project team planning – university case study. Journal of Information and Telecommunication, 2021, 5, 310-333.	2.2	0
129	A fuzzy logic approach to fault-tolerant scheduling of semi-automated assembly systems* . , 2021, , .		0
130	Periodic distributed delivery routes planning subject to operation uncertainty of vehicles travelling in a convoy. Journal of Information and Telecommunication, 0, , 1-21.	2.2	0
131	Towards Interactive CLP – Based and Project Driven Oriented DSS Design. , 2007, , 351-358.		0
132	Knowledge–Based and CP–Driven Methodology for Dedicated DSS Design. , 2007, , 441-448.		0
133	UAVs–™ Dynamic Routing, Subject to Time Windows Variation. IFAC-PapersOnLine, 2022, 55, 457-462.	0.5	0